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Oil, Paint and Drug Reporter

Vol. 171 No. 12 30 Church St., New York 7, N. Y. March 25, 1957

Toilet Goods at New High

Total sales of perfumes, cosmetic and other toilet preparations, excluding toilet soaps, reached a new high record in 1956, according to the Toilet Goods Association. Retail sales for 1956 reached $1,321,000,000 —an increase of approximately 10.8 percent over the total figure for 1955 which in itself was an all-time high record.

The increase extended pretty generally throughout the entire list of products. Dentifrices which normally show an annual gain of 5 percent showed an increase of 10.5 percent but the increase of sales of these products in food stores was greater than 16 percent.

Shaving preparations showed an almost identical picture with respect to type of outlet, with food store sales gaining substantially over those of other outlets. The total increase was about 9 percent with aerosol products accounting for by far the greater portion of this gain.

Business in make-up items showed a gain of more than 14 percent, due principally to the impact of heavy promotion by leading companies in the field. The increase in hair preparations as a general class was less than during the last two or three years but was still a substantial 12.5 percent. Sales of deodorants increased by nearly 20 percent with the male market predominating.

Fragrance products as a whole lagged but did show a slight increase over 1955, all of which, however, was due to increased sales in colognes and toilet waters. Some individual houses showed a fairly sharp gain in perfume sales approximating the 10 percent shown by the industry as a whole but this pattern was very irregular and a considerable number of houses lagged far behind.

Every type of outlet showed some gain in total sales but the gain in several categories was below the overall percentage of increase.

Phosphate Measure to Double Land Leases Backed by Majority Of Western Reserve Operators

Several chemical companies are urging congress to double the area of phosphate lands in a single state which may be held under lease from the federal government by a single operator. Although their position is not unanimous (one company opposes it), they say the legislation would encourage development of western supplies of the mineral and provide industry with a cushion for expanding operations. Their appeals are part of the testimony given to a subcommittee of the senate interior committee.

Backing the position of the several companies operating in the western phosphate reserves is the Department of the Interior, which has administrative responsibility for leasing the lands. Opposition to a change, however, has been expressed in a statement filed by San Francisco Chemical Company.

Bill Would Remove Ceiling

Occasion for the requests was hearings held last week by the subcommittee on S 334, which would remove the present ceiling on the acreage that may be held in a single state. The law provides that 10,240 acres may be leased by one person but not more than 5,120 acres may be located in a single state. The bill would simply remove the latter ceiling without disturbing the overall limitation of 10,240 acres.

The opposition of San Francisco Chemical Company, which was described as the largest producer of phosphate rock for general use in the western United States, was based on a belief that the removal of the state limitation would induce wasteful practices in the industry in the mining of the rock.

The company's statement, signed by D. L. King, president, said that the legislation would appear to serve no legitimate

—*Continued on page 38*

RETIRING EXECUTIVE: Walter Dannenbaum, who will retire at the end of this month as a vice-president and member of the executive committee of E. I. duPont de Nemours & Co., Wilmington, Del., after a career of nearly forty-three years.

Explosives Transport Bill Aims For a Wholesale Revision of Law

Senate bill 1491 aims to bring about a wholesale revision of the fifty-year-old explosives transportation law in the light of such modern day problems as atomic materials and highly dangerous etiologic agents. The aim of the bill is a wholesale revision and not a piecemeal re-write, says chairman Owen Clarke of the Interstate Commerce Commission. Mr. Clarke defended the bill before the senate interstate commerce committee last week at the opening of hearings on this and a series of other bills having to do with safety in transportation.

ASS'T PRODUCT MANAGER: F. G. Ferrick, who has been named assistant product manager, specializing in sales of unsaturated fatty acids, for the chemical division of Armour & Co., Chicago.

The measure is not designed to restrict the movement of these commodities to any particular class of carrier or persons, Mr. Clarke said. He added that the intention is to limit and regulate all transportation of extremely dangerous items by providing that they shall not be transported except under rules and regulations prescribed by the ICC.

Hearings are expected to run for about a week with representatives of a number of shipper industries, including the chemical industry, invited to testify. A spokesman for the Manufacturing Chemists Association is scheduled to make a statement on the bills late in the hearings.

The bill dealing with explosives transportation would enlarge the scope of the present law by specifically including radioactive materials and etiologic agents. It would also make the act applicable to contract and private carriers as well as com-

—*Continued on page 60*

Sulfamic Acid Works Projected by duPont

A new production unit to manufacture sulfamic acid and "Ammate" weed and brush killers will be built by E. I. duPont de Nemours & Co., Wilmington, Del., on the site of its present plant at East Chicago, Ind.

"The new unit will double the company's production of these two important products and will provide an adequate supply to meet future needs of our customers," Clark W. Davis, general manager of the Grasselli chemicals department, said. "In addition, it will permit us to

—*Continued on page 67*

Minnesota Mining Acquires KEL-F From M. W. Kellogg

Minnesota Mining & Manufacturing Company, St. Paul, Minn., has purchased the KEL-F chemical manufacturing business from M. W. Kellogg Company, New York, a subsidiary of Pullman, Inc.

3M officials said negotiations have been completed for the St. Paul firm to take over the KEL-F manufacturing facilities adjacent to Kellogg's Jersey City, N. J., steel fabricating plant and research laboratories.

A Kellogg spokesman said the sale would have no effect on the M. W. Kellogg petroleum and petrochemical research laboratories or the other Kellogg manufacturing activities in Jersey City.

3M said its primary interest in purchasing the KEL-F business was to develop additional uses for high temperature, corrosion-resistant resins, particularly within the chemical field and for pharmaceutical packaging.

Merck Sees No Vitamin A Supply Delay Despite Blast

An explosion last week at Rahway, N. J., in the vitamin A plant of the Merck & Co. chemical division killed three employees and injured several others.

Although extensive damage was done to the facility, Merck will have no trouble in supplying vitamin A, according to Dr. William M. McLean, division president. He said that the damage, while running into the thousands of dollars, is confined to one building.

Cause of the explosion had not been determined at week's end, although the company and specialists from the New Jersey Department of Labor and the insurance companies were conducting a thorough investigation.

The damaged building was built in 1950, and vitamin A has been made there for over five years without any prior accidents.

Binney Int'l Changing Name

Binney & Smith International, Inc., New York, becomes Columbian Carbon International, Inc., on April 1. This represents a change of name only since the same people will continue to represent Columbian Carbon Company abroad in the sale of its carbon black.

Methyl Butynol Plant Planned by Airco Unit

Methyl butynol (2-methyl-butyn-2-ol), a tertiary acetylenic alcohol, will move into commercial, continuous-process production for the first time in the United States by the end of the year.

So says Air Reduction Chemical Company, New York, a division of Air Reduction Company, which will build a plant at Calvert City, Ky., with an annual capacity of 3 million pounds. Initial production is expected this fall.

The process, developed by Air Reduction research, involves the reaction of

—*Continued on page 38*

Borg-Warner Will Spend $6.5 Million on Chemicals

Borg-Warner Corporation, Chicago, plans to spend about $6.5 million this year to complete the new $10 million chemical plant of its Marbon Chemical Division in Washington, W. Va.

This project is being built on a twenty-two acre Ohio River-front site and will go into production this spring. It will manufacture a hard, tough plastic called "Cycolac."

Union Carbide to Vote On a Change of Name

Stockholders of Union Carbide & Carbon Corporation, New York, will vote on a proposal to change the corporation's name to Union Carbide Corporation at the annual meeting for stockholders to be held on April 16.

If stockholders approve, the effective date of the change will be May 1. The corporation is generally known and referred to as "Union Carbide" by its stockholders, employees, and the general public.

Polio Vaccine to Be Scarce—But Only Temporarily

The country will be faced with a shortage of Salk polio vaccine in the next two weeks, but by July 1 sufficient new supplies will have been released to permit the vaccination of all persons under twenty years of age as well as expectant mothers, Surgeon-General Leroy E. Burney testified last week.

Appearing before a subcommittee of the house government operations committee investigating the sudden shortage that has developed in the vaccine supply, Dr. Burney said that the five producers expect to have available about 45 million cubic centimeters between March 1 and July 1, which together with the July-February production of 10.5 million cc., and the January 1 carryover of 26 million cc., will be enough to take care of the group eligible for free supply.

The 75 to 80 million cc. to be available in the first six months of this year compares with only 77 million cc. of the vaccine shipped during the entire year of 1956.

The present shortage, the Surgeon General said, was a wholly unexpected development, and was probably due to a series of factors climaxed by the program of the American Medical Association for more widespread use of the vaccine suddenly proving its effectiveness. Starting about February 15, demand for the vaccine started to pick up, and in the following three weeks, 15 million cc. carried over from last year was sold, plus the 10.5 million cc. of new supplies produced during January and February of this year.

Dr. Burney urged that private immunization programs, such as those being carried on by E. I. duPont de Nemours & Co.,

—*Continued on page 48*

Chemicals and Drug Products Are Under Study for Tariff Cuts

Consideration is being given by the government to the granting of tariff reductions on several chemicals and drug products, along with certain woven fabrics and textile machinery, as compensation to Great Britain and Belgium for the increases in US duties on linen towling last July. Announcements by the Tariff Commission and the Committee for Reciprocity Information last week fixed the dates of April 24 and 25 for public hearings on the items selected for consideration, and April 17 as the final date for giving notice of intentions to testify and filing of written statements.

TECHNICAL SERVICES CHIEF: Henry F. Maso, appointed director of technical services of American Cholesterol Products, Inc., Edison, N. J.

The hearings before the Tariff Commission will be for the purpose of determining the "peril points" below which duties should not be cut if injury to the domestic industry is to be avoided. The hearings before the Committee for Reciprocity Information are for the purpose of taking testimony on the question whether the item should be considered for tariff concession at all.

Chemicals on Concession List

Items in the chemical schedule which were included on the list as being considered for tariff concession are:

Sodium alginate, dutiable under paragraph 5 of the tariff act of 1930; spermaceti wax dutiable under paragraph 52; zinc chloride and zinc sulfate dutiable under paragraph 93; and the following items dutiable under paragraph 218 (a):

Biological, chemical, metallurgical, pharmaceutical, and surgical articles and utensils of all kinds, including all scientific articles and utensils, whether used for experimental purposes in hospitals, laboratories, schools or universities, colleges, or otherwise, all the foregoing, finished or unfinished, wholly or in chief value of fused quartz or fused silica.

Any reductions in tariffs on these products would be subject to the limitations contained in the 1955 extension of the trade agreements act. This law permitted reductions up to 15 percent below the rates then in effect, with the reductions spread over a three year period. Since one year has already expired, the government has authority remaining to reduce the rates by only 10 percent, to be spread over two years. To get the full benefit of this authority, the concessions will have to be negotiated by June 30 at which time the authority will drop to 5 percent.

Polyethylene Plant On Commercial Basis

Phillips Petroleum Company's wholly-owned subsidiary, Phillips Chemical Company, has begun large-scale commercial production of its rigid-type polyethylene, trademarked "Marlex 50." Tonnage quantities of the plastic have started moving to fabricators throughout the country from the Phillips Chemical manufacturing site on the Houston Ship Channel in Texas. Capacity of the "Marlex 50" polyethylene plant at this site is scheduled to reach 75 million pounds per year during the last half of the year as additional equipment is placed in operation.

An ethylene plant of 180 million pounds initial capacity adjacent to Phillips Petroleum Company's Sweeny refinery will supply the basic material through a seventy-five-mile pipe line to the "Marlex" plant. Underground caverns washed from deep salt formations, near Sweeny Refinery, will store ethylene.

A domestic price of 77 cents per pound delivered has been announced for natural, uncolored "Marlex 50" polyethylene in shipments of 20,000 pounds and more. Sales of "Marlex 50" resin are handled by the plastics sales division, Phillips Chemical Company.

DCAT Charges Pricing Bill Is Unfair to Business Firms

Legislation pending before congress to amend the Robinson-Patman act by curbing a seller's right to meet competitive prices will impose an unfair and onerous burden upon business, according to the Drug, Chemical and Allied Trades section of the New York Board of Trade.

In communications to members of the senate committee on antitrust and monopoly legislation and a subcommittee of the house judiciary committee reviewing HR 11 and S 11, DCAT charged the bill, which would eliminate the "good faith" provision in the act, will take away industry's protection in meeting competi-

—Continued on page 49

The Week's Price Changes

Iron Oxide Pigments, Oiticica Oil, Linseed Meal Advance. Soybean Meal, Oleo Stearine, Copra and Cutch Decline.

Prices Advanced

Iron oxide pigments, ¼c. to ½c. per lb. (p. 58).
Linseed meal, 50c. to $1 per ton (p. 61).
Oiticica oil, ¼c. per lb. (p. 61).

Prices Reduced

Cananga oil, native, 10c. per lb. (p. 54).
  Rectified, 25c. per lb.
Citronella oil, 5c. per lb. (p. 54).
Cocoa butter, 2c. per lb. (p. 61).
Coconut oil, crude, ⅛c. per lb. (p. 61).
Copra, $2.50 per ton (p. 61).
Corn oil, crude, ¼c. per lb. (p. 61).
  Refd., ¼c. per lb.
Cottonseed meal, 50c. per ton (p. 61).
Cottonseed oil, crude, ⅜c. per lb. (p. 61).
  Refd., ⅜c. per lb.
Cutch, ¼c. per lb. (p. 45).
Greases, ⅛c. per lb. (p. 61).
Linseed oil, 2/10c. per lb. (p. 61).
Linseed oil acids, 2/10c. per lb. (p. 61).
Molasses, New Orleans, ¼c. per gal. (p. 40).
Oleo stearine, 1c. per lb. (p. 61).
Peanut meal, $1.50 per ton (p. 61).
Peanut oil, crude, ¼c. per lb. (p. 61).
  Refd., ¼c. per lb.
Sandalwood oil, 50c. per lb. (p. 54).
Soybean meal, $1 per ton (p. 61).
Soybean oil, crude, ½c. per lb. (p. 61).
  Refd., ½c. per lb.
Tallow, edible, ½c. per lb. (p. 61).
  Inedible, ½c. per lb.

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:—

(100=1949 average)

March 22, 1957	March 15, 1957	March 23, 1956
110.70	110.77	107.57

Grace to Build Nuclear Facility

W. R. Grace & Co., New York, will begin construction immediately on a plant to produce basic raw materials for nuclear reactor fuel. The plant will be located at Erwin, Tenn., and is designed to produce uranium, thorium, and rare earths alloys and metals for reactors now in use or under construction by both private enterprise and defense units. Other than uranium, thorium is the only naturally occurring element which can be converted into fissionable material.

The plant will be the first of its kind financed and operated entirely by private enterprise.

Grace described the new production plant as "a logical extension" of the company's rare earths and thorium operations now being carried out at Pompton Plains, N. J., and Curtis Bay, Md.

Three Units in Installation

The installation will consist of a solvent extraction plant producing pure thorium and uranium salt, a reduction plant which will convert the salt to metal powder or sponge, and a melting and casting plant containing both vacuum induction and arc melting facilities.

Various forms of thorium and uranium are required for atomic power reactors now in existence, building or planned. Thorium metal to be produced by the new plant is also expected to find extensive use in magnesium alloys for jet air craft and guided missiles.

The plant and its facilities will be made

—Continued on page 60

DuPont Starts Unit For Tetraethyl Lead

E. I. duPont de Nemours & Co.'s multi-million dollar tetraethyl lead plant in Antioch, Calif., for the manufacture of anti-knock compound is now in production.

Tetraethyl lead will be shipped from the plant to refiners west of the Rockies. The Antioch plant also produces "Freon" refrigerants. Construction was started in August of 1955, and the section which produces "Freon" made its first shipment in December, 1956.

Dow Will Lower Its Price On Styrene Monomer July 1

Dow Chemical Company, Midland, Mich., has announced a reduction in the price of "Styrene N 90," Dow's high specification styrene monomer, effective July 1, to 16 cents per pound for tankcar quantities, terms freight prepaid.

Price differentials are to be 2½ cents per pound for carload or truckload drums and 4½ cents per pound for less carlot or less truckload quantities.

This type of styrene is used principally in the manufacture of styrene polymers and copolymers.

Metal & Thermit Offering New Organotin Stabilizer

Metal & Thermit Corporation, Rahway, N. J., has announced the development of an all-purpose organotin stabilizer, "Thermolite 25."

Produced to provide the vinyl industry with a potent light and heat stabilizer, "Thermolite 25" is said to be effective with every polyvinyl chloride and copolymer resin now commercially available. Extensive research and field testing reveal that vinyl products stabilized with "Thermolite 25" possess outstanding optical clarity and many problems associated with stabilization are also eliminated, Metal & Thermit said.

The new stabilizer is sulfur free and does not have the characteristic odor of sulfur-containing stabilizers, according to the producers.

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HOFFMANN-LA ROCHE'S AROMATICS UNIT: Philip C. Burnham (right), formerly with R. W. Greeff & Co., who has been named by Hoffmann-La Roche, Inc., Nutley, N. J., to take over as sales manager of its newly-formed aromatics division in May. Burton T. Bush, jr. (left), formerly with S. B. Penick & Co., who has been appointed assistant sales manager of the aromatics division.

Monsanto to Construct Facility For Continuous Acid Production

Monsanto Chemical Company will begin production immediately in Everett, Mass., of a plant for the continuous production of dichloroisocyanuric and trichloroisocyanuric acids. The plant is said to be the first of its kind in the country. Large scale production of the two products marketed under Monsanto trade marks "ACL-70" and "ACL-85," respectively, is the culmination of extensive research, pilot plant testing and customer trial, it was pointed out.

AID TO ALCOHOL MANAGER: Thomas R. Drinkwater, made assistant to the manager of alcohol and chemical sales for U. S. Industrial Chemicals Company, division of National Distillers Products Corporation, New York.

The plant, which is a multimillion-pound-a-year unit, is expected to be operating this fall. For the past two years, pilot plant facilities have been operating continuously at Everett to provide experimental quantities of "ACL-70" and "ACL-85" for market investigation.

Major uses for the two chemicals, each with high available chlorine content, in a solid form, are as active ingredients for the dry household bleaches, commercial laundry bleaches and industrial sanitizing agents.

Many unique chemical engineering features will be incorporated in the new plant, including automatic control for the continuous process. Several equipment items have been designed by engineers from Monsanto's inorganic chemicals division.

The two products are outgrowths of basic research done by Monsanto, several years ago, in the field of nitrogen and isocyanate chemistry. Research has continued on these products, with limited commercial quantities of "ACL-85" first being made available in 1953.

Emery Is Forming Affiliate in Canada

Emery Industries, Inc., Cincinnati, Ohio, has taken another major step in its expansion program with the formation of a wholly-owned subsidiary, Emery Industries (Canada), Ltd.

The new company will acquire the land, buildings, manufacturing facilities and exiting fatty acid business of S. F. Lawrason & Co., Ltd., of London, Ontario, on April 1. Lawrason has been a producer of fatty acids in Canada for more than seventy-five years.

R. T. Hull, associated with Emery for many years in sales, product management

—Continued on page 49

Heyden Develops Process To Improve Alkyd Resins

Heyden Newport Chemical Corporation, New York said last week that its researchers have developed a high-polymer alkyd technic which improves the property of resins.

This method for processing alkyd resins includes a step-wise esterification of fatty acids that increases the proportion of high-molecular weight polymers.

The new Heyden Newport technic is being offered to resin manufacturers and is expected to have wide application in the surface coatings field. Adaptable to standard equipment for either fusion or solvent processes, it is said to be particularly suitable for the manufacture of long-oil alkyds from pentaerythritol and tall oil fatty acids.

The technic, when applied to conventional formulations, is claimed to produce resins with faster drying times, improved alkali and detergent resistance, better

—Continued on page 60

Sulfuric Acid and Fertilizers Are Seen as the Crucial Factors In Soviet Chemical Structure

Sulfuric acid and fertilizers are the crucial factors in the chemical industry of the Soviet Union. While sulfuric is generally regarded as the yardstick of a nation's chemical economy, this is not true in the USSR. That is the conclusion drawn by the German magazine *Chemische Industrie* in a report on the present status of Soviet chemicals, as well as the projected goals of the industry in 1960 under the current five-year plan.

While the chemical industry in Russia has advanced during the past few years until it represents from 12 to 13 percent of the total industrial economy, the magazine sees little present evidence of vertical integration.

Sulfuric Used in Fertilizer

In Russia, sulfuric acid serves chiefly as a raw material for manufacture of fertilizer, and other uses are largely limited to production of explosives and other strategic goods.

The major portion of finished sulfuric acid generally goes with phosphates into the production of superphosphates. Sulfuric acid output in 1956 was around 4.3 million metric tons H_2SO_4.

A further part of the sulfuric acid would be put into the recovery of ammonium sulfate. Since the importance of farming economy at present is of first precedence, the building of fertilizer factories must be speedily pursued. In view of this, sulfuric acid factories must nearly double their output by 1960.

Chemische Industrie estimates that in 1960, nearly 20 million metric tons per year of fertilizers of all kinds will be produced by phosphate, potash and nitrogen factories.

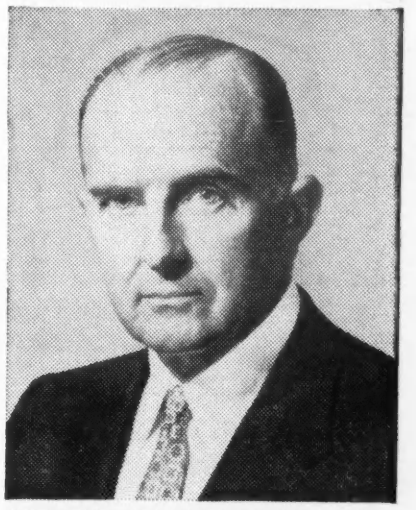
Production growth of specified items is estimated in the following table:

Production Growth of Fertilizers

	Metric Tons 1955	1960
Phosphates	5,000,000	16,200,000
P_2O_5 content	1,000,000	2,040,000
Potash concentrates	2,000,000	4,100,000
K_2O content	1,000,000	2,050,000
Nitrogen fertilizers	2,600,000	5,300,000
N content	770,000	1,590,000

Production of nitrogen fertilizers reached nearly 700,000 metric tons N in 1955. It should reach around 1.6 million tons N by 1960. At the same time the

—Continued on page 57



OUTGOING COLGATE PRESIDENT: William Lee Sims, 2nd, who has resigned as president and a director of Colgate-Palmolive Company, New York. E. H. Little, chairman and chief executive officer, will now serve as both chairman and president of Colgate.

Rohm & Haas Reports New Uses for 'Dithane' Fungicide

A number of new uses have been found for its "Dithane" fungicide, Rohm & Haas Company, Philadelphia, reveals in its annual report.

For one thing, a company spokesman told OPD, the material is mixed with the soil to protect cotton seedlings against parasitic diseases. "Dithane" is added to the soil as the seed is dropped, by special equipment on the planters.

The material is also used on apples—as late cover sprays in summer diseases control. The company claims it offers long protection for the fruit.

Rohm & Haas plans to spend about $36 million on construction this year, a new high. Most of the money will be for major projects started in 1956.

The largest of these is a plant in Houston, Tex., for the manufacture of acetylene, ammonia and methanol. The firm is also installing new capacity for the production of acrylates, methacrylates and related intermediates at Houston.

The balance of the construction allocation will be mainly for facilities to manufacture new products and to boost output for its current line.

Nichols Interests Merge

Nichols Seed Company and Nichols Fertilizer & Chemical Company, Oklahoma City, Okla., have merged to form Nichols Seed & Fertilizer Company.

Vickers to Put Up Petrochemical Plant

Vickers Petroleum Company next month will start construction of a petrochemical plant at its Potwin, Kan., refinery for the production of benzene, toluene, xylene and aromatics classified as having nine to eleven carbon atoms.

The $2 million plant will be a Udex unit which will remove the aromatic hydrocarbons contained in the reformate resulting from the million dollar catalytic reformer now under construction at the Potwin refinery.

Over fifteen million gallons of chemicals will be produced annually at the plant. One hundred new tankcars have been ordered by Vickers from American Tank Car Company for early 1958 delivery to be used in the transportation of the chemical raw materials to the major consuming areas of Minneapolis, Minn.;

—Continued on page 37

Goodrich Chemical to Erect Ohio Specialty Organic Unit

B. F. Goodrich Chemical Company, Cleveland, Ohio, a division of B. F. Goodrich Company, has taken an option on a 240 acre tract near Henry, Ill., for the construction of a $5 million chemical plant.

The plant will produce specialty organic chemicals, such as anti-oxidants for use in petroleum rubber, plastics and other industries. Initial construction plans include three units: A process building, an office-warehouse-machine shop and a steam-generating plant.

Amoco Starts to Build Illinois Chemical Plant

Amoco Chemicals Corporation, Chicago, will start construction immediately on a plant near Joliet, Ill., for the production of phthalic anhydride, isophthalic acid, terephthalic acid, dimethyl terephthalate, dimethyl isophthalate and benozic acid.

The raw materials, mixed xylenes, will be obtained from the Standard Oil Company (Indiana) refinery at Whiting, Ind. The plant is expected to be operating in 1958.

Pfizer Using Newspapers to Distribute Annual Report

A colorful new technic in financial journalism is being adopted by Chas. Pfizer & Co., Brooklyn, N. Y., which will permit the readers of three of the nation's leading newspapers to learn first-hand how a typical corporation reports to its shareholders.

In what is believed to be the first distribution of its kind, the annual report to shareholders will be printed as special supplements in color in the New York *Times* on March 31 and in the Chicago *Tribune* and Los Angeles *Times* on April 14.

Combined circulation of these newspapers, published in the nation's three most populous cities, is over 3.5 million.

The newspaper edition of the report will be identical in format and content to the one mailed March 15 to the company's 22,000 shareholders.

Contained in the publication are the message from the company president, John E. McKeen, to Pfizer shareholders, marketing data, a statement of financial position, a consolidated earnings statement and other material ordinarily included in a corporate annual report.

Also a part of the report are several feature articles dealing with special phases of the company's business. Among these is a report entitled "The Health Team Behind Modern Medicine," which describes the teamwork of doctors, pharmacists, manufacturers and researchers in making available today's drugs.

Included is a statement by New York Stock Exchange president G. Keith Funston, expressing the exchange's philosophy on corporate reporting.

"Full disclosure," Mr. Funston is quoted as saying, "is an ingredient essential to

—Continued on page 36

CSC NITROPARAFFINS

NITROMETHANE
CH_3NO_2

NITROETHANE
$CH_3CH_2NO_2$

1-NITROPROPANE
$CH_3CH_2CH_2NO_2$

IMPROVING PROCESSES AND PRODUCTS

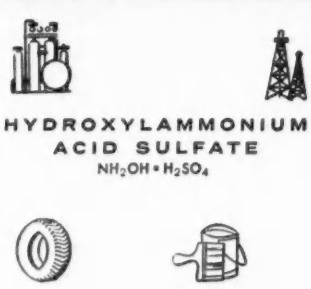
2-NITROPROPANE
$CH_3CHNO_2CH_3$

2-AMINO-2-METHYL-1-PROPANOL
$CH_3C(CH_3)NH_2CH_2OH$

TRIS (HYDROXYMETHYL) AMINOMETHANE
$(CH_2OH)_3CNH_2$

FOR AMERICA'S MAJOR INDUSTRIES

2-AMINO-2-METHYL-1, 3-PROPANEDIOL
$CH_2OHC(CH_3)NH_2CH_2OH$



HYDROXYLAMMONIUM ACID SULFATE
$NH_2OH \cdot H_2SO_4$

ALKATERGES

Nitroparaffins and their derivatives are economical, effective, versatile chemicals for such uses as solvents . . . prime ingredients . . . raw materials . . . sensitizers . . . emulsifiers . . . analytical reagents . . . reducing agents . . . inhibitors . . . short-stoppers . . . surface activants . . . dispersants . . . anti-foamants.

In a relatively short time, the members of the nitroparaffin family found wide use in many important industries.

New groups of derivatives are being studied continually for new and profitable applications. Steadily increasing quantities of these unusual chemicals are being shipped from CSC's plant in Sterlington, La.

Our Market Development team is ready to work with you in applying these outstanding products to your processes and products. Samples and technical data sheets are available on request.

DISCOVER THE NITROPARAFFINS!

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COMMERCIAL SOLVENTS CORPORATION

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In Canada: Reliance Chemicals, Ltd., Montreal *In Mexico:* Comsolmex, S. A., Mexico, 11, D. F.

CHEMICAL PROGRESS WEEK APRIL 8 12

Association Meetings

Combined Pharmaceutical Contact Committee of American Drug Manufacturers Association and American Pharmaceutical Manufacturers' Association, Washington hotel, Washington, D.C., March 26-27.

Commercial Chemical Development Association, plastics meeting, Statler hotel, New York, March 27-28.

Council for Agricultural & Chemurgic Research, annual chemurgic conference, Congress hotel, Chicago, March 26-28.

Air Pollution Control Association, annual meeting, St. Louis, Mo., June 2-6.

American Chemical Society, national meeting, Miami, Fla., April 7-12.

American Drug Manufacturers Association, annual meeting, El Mirador hotel, Palm Springs, Calif., April 22-25.

American Institute of Chemists, annual meeting, Sheraton-Mayflower hotel, Akron, Ohio, May 22-24

American Pharmaceutical Manufacturers' Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., May 27-29.

American Society for Testing Materials, annual meeting, Chalfonte-Haddon Hall, Atlantic City, N. J., June 16-21.

American Zinc Institute, annual meeting, Drake hotel, Chicago, April 25-26.

Association of Consulting Chemists & Chemical Engineers, banquet and symposium, Belmont Plaza hotel, New York, April 24; annual meeting, Belmont-Plaza hotel, New York, October 22.

Chemical Market Research Association, New York, May 27-28; Lake Placid, N. Y., September 16-17.

Chemical Progress Week, April 8-12.

Chemical Specialties Manufacturers Association, midyear meeting, Drake hotel, Chicago, May 20-22

Commercial Chemical Development Association, resort meeting, French Lick, Ind., May 13-14.

Drug, Chemical and Allied Trades section of New York Board of Trade, annual meeting, Galen Hall, Wernersville, Pa., September 19-21.

Electrochemical Society, Statler hotel, Washington, D. C., May 12-16.

Federation of Paint and Varnish Production Clubs, annual convention, Bellevue-Stratford hotel, Philadelphia, October 30-November 2.

Flavoring Extract Manufacturers' Association, annual convention, Roosevelt hotel, New York, May 19-22.

Lead Industries Association, annual meeting, Drake hotel, Chicago, April 24-25.

Manufacturing Chemists Association, air and water pollution abatement conference, Shoreham hotel, Washington, D. C., April 4-5; annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 6-8.

National Packaging Exposition, sponsored by American Management Association, International Amphitheatre, Chicago, April 8-11.

National Paint, Varnish and Lacquer Association, annual convention, Sheraton-Park and Shoreham hotels, Washington, D. C., November 4-6.

National Plant Food Institute, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 9-13

Parenteral Drug Association, annual midwest meeting, Edgewater Beach hotel, Chicago, April 12.

Proprietary Association, annual convention, Greenbrier hotel, White Sulphur Springs, W. Va., May 12-15.

Salesmen's Association of the American Chemical Industry, beefsteak dinner, Toots Shor's restaurant, New York, April 4.

Society of Flavor Chemists, luncheon and flavor symposium, Roosevelt hotel, New York, May 22.

Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Roosevelt hotel, New York, April 9; annual outing Skytop Lodge, Skytop, Pa., May 27-29.

Toilet Goods Association, annual convention, Waldorf-Astoria hotel, New York, May 7-9.

TGA Meeting Theme Will Be 'Personality' as it Affects Profit, Product and Marketing Picture

"Personality—Key to Future Profits," will be the theme for the twenty-second annual convention of the Toilet Goods Association, to be held May 7 through 9 at the Waldorf-Astoria hotel, New York. The theme will be expressed on the opening day by Otis L. Wiese, editor and publisher of *McCall's* magazine, who will set the background for the convention by exposing the underlying forces that shape the personality of American today and strongly affect the toiletries market.

Three business sessions will be devoted to panel discussions of packaging, distribution and promotion, and the manner in which each of these can help to build the unique personality of a particular product.

'Jury' to Question Speakers

An unusual feature of the three panel discussions will be the use of a "jury box" filled with a group of representatives of the toilet goods industry—a different group for each subject. Members of the "jury" will question the speakers on each subject. Seventeen industry leaders will serve on these "juries."

The convention will open with the annual address of the president, Pierre Harang, vice-president of Houbigant Sales Corporation. In the afternoon Florence Goldin, of Grey Advertising, will speak on "What Women Want in a Toiletries Personality."

This will be followed by a panel discussion on "Personality and Your Package," with Jack Cawley as chairman. The panel members will be: Kay Brown, of Yardley of London, Inc., who will speak on "Packages and Women;" Donald Deskey, package designer, whose topic will be "Product Personality in Your Package Design," and "Lloyd Stouffer, of *Modern Packaging*, who will speak on "New Packaging Trends."

On the morning of May 8 there will be a panel on "The Changing Personality of Toiletries Distribution," with Jean Despres, of Coty, Inc., as chairman.

Members of Panel

Panel members and their topics will be: Ade Schumacher, Liggett-Rexall Drug Stores, "Changing Personality of Today's Drug Store; "Dr. Herman Nolen, McKesson & Robbins, "Changing Personality of the Drug Wholesaler;" Joseph Handleman, Handleman Drug Company, "Changing Personality of Today's Super Market;" Phillip Schindell, Limited Price Variety Association, "Changing Personality of the Variety Store," and John Strauss, R. H.

—*Continued on page 52*

HEADS WARREN AFFILIATE: Wilson M. Williams, named president of Warren Petroleum International Corporation, New York, newly-formed affiliate of Warren Petroleum Corporation of Tulsa, Okla.

FEMA Schedules Prominent Speakers

Speakers prominent in business and government circles will be on the program for the forty-eighth annual convention of the Flavoring Extract Manufacturers' Association, to be held in the Roosevelt hotel, New York, May 19 through 22.

Dr. Robert A. Osborn, of the division of food in the Bureau of Biological and Physical Sciences of the Food and Drug Administration, has prepared a talk entitled, "The Establishment of Standards of Identify for Foods under the Federal Food, Drug and Cosemetic Act."

Ralph E. Burgess, chief economist for American Cyanamid Company and consultant to the Joint Economic Committee of Congress, will also be a featured speaker. He will review present and future business conditions and discuss

—*Continued on page 59*

Soybean Growers Are Planning To Boost Their Acreage This Year

Soybean growers are planning another increase in acreage this year. In the first report of 1957 on prospective plantings, the Crop Reporting Board of the Department of Agriculture reports soybeans are expected to be grown on 22.7 million acres this year, the eighth consecutive year of increase. The area would indicate a crop of 30 million bushels. This year's moderate gain of 4 percent is due to rises in most main producing states, with Illinois, Minnesota, Iowa and Arkansas leading in expansions.

The board noted that government support price for the 1956 crop of soybeans was announced well in advance of the date farmers reported their March intentions. However, any changes this spring in other government programs, especially for corn, and the ability to plant other spring crops due to weather may affect the acreage actually planted to soybeans.

Flaxseed Intentions the Same

Farmers intentions to plant flaxseed for harvest this year indicated an area of 5.8 million acres, or about the same as the acreage seeded last year and the fourth largest acreage in thirty-seven years of record. The largest seeding was made in 1943, when 6,182,000 acres were sown.

Reports from peanut growers indicate they may intend to plant 1,834,000 acres. This will be only a few thousand acres below that planted in 1956 but 32 percent below the 1946-55 average. The acreage with average yields would indicate a crop this year of 1.3 billion pounds of peanuts, compared with 1.6 billion pounds in 1956.

Spencer Kellogg, Beacon Talk Plans for a Merger

Spencer Kellogg & Sons, Inc., Buffalo, N. Y., and Beacon Milling Company, Cayuga, N. Y., have agreed in principle to a merger, subject to stockholder approval.

The merger with Beacon would provide a substantial outlet for several of Spencer Kellogg's co-products, including soybean meal and linseed meal. Stock would be exchanged on the basis of 1.3 shares of Kellogg for every share of Beacon.

AZI to Consider The Future of Zinc

Major features of the American Zinc Institute's annual meeting, to be held at the Drake hotel, Chicago, April 25 and 26, will be panel discussions on zinc's future five to ten years hence.

For the first time in the industry's history, major representatives of the automotive, rubber, galvanizing, die casting, paint, brass rolled zinc, and zinc anode industries have been invited to serve on a panel which will evaluate zinc industry performance in the light of present and future consumer needs, and suggest possible directions for zinc industry study and advancement. The first—a panel largely of consumers—will meet at 2 p.m., April 25. It will consist of Joseph Gurski, assistant manager, process development department, Ford Motor Company for the automotive industry; David Marvel, vice president for sales, Western Brass Mills Division, Olin Mathieson Chemical Corporation, on brass; Ralph G. Thompson, material and process laboratories, major appliance division, General Electric Company on die casting; H. R. Breslau, vice

—*Continued on page 37*

SOCMA Shifts Meeting Date

Synthetic Organic Chemical Manufacturers Association has moved up the date of its next monthly luncheon meeting. Originally scheduled for April 10, SOCMA's meeting will now be held April 9 at the Roosevelt hotel, New York.

Pfizer's Sales Up 9 Percent; Earnings Soar by 19 Percent

Sales and earnings of Chas. Pfizer & Co., Brooklyn, N. Y., last year were the highest in the company's 108-year history, according to its annual report.

Pfizer reports consolidated sales of $178,362,196, up 9 percent over the 1955 total of $163,794,654. Net earnings rose 19 percent from $15,326,967 in 1955 to $18,253,979. Earnings before income taxes were up 22 percent from $26,570,967 to $32,427,979.

Profits per share of common stock after payment of preferred dividends were $3.36 on 5,284,543 shares outstanding, against $2.94 in 1955 on 4,959,902 shares outstanding.

In his message to shareholders, president John E. McKeen attributes the record-breaking volume to the generally high level of industrial activity, a firmer market for bulk antibiotics and the introduction of new products.

Chief among the new products which enabled the company to set a new sales record for the seventh successive year were "Sigmamycin," a multi-spectrum antibiotic, and "Atarax," a tranquilizer marketed by the firm's J. B. Roerig & Co. Division.

SAACI Will See Pictures Of World Series at Dinner

A beefsteak dinner featuring motion picture highlights of the 1956 World Series will be held by the Salesmen's Association of the American Chemical Industry at Toots Shor's Restaurant, New York, April 4. Ala carte bar opens at 6 p.m., with dinner scheduled for 7:30 p.m. Showing of Lew Fonseca's "Official American and National League Pictures of the 1956 World Series" is set to start at 8:45 p.m.

M. Testa, jr., Shell Chemical Corporation, New York, chairman of SAACI's entertainment committee, is handling reservations for the beefsteak and baseball party. Attendance is limited to 250 and the cost is $11.50 per person for members or guests.

Perfume Conference Considers the Future and the Past

What the future is likely to hold as well as the accomplishments of the immediate past were the basic themes of the third annual symposium on fragrance, held by the American Society of Perfumers in New York last week.

Camille H. Bourguet, of American Aromatics, Inc., pointed out that the perfumer works with hundreds of fragrant materials, without any physical scale for arranging them, comparable to those available for colors and for musical notes. To work successfully, he must develop a classification system and a means of olfactory analysis of complex fragrances. He must evolve mental concepts of the subtle notes that cooperate to produce an olfactory impression, said Mr. Bourguet.

H. C. Saunders, of Givaudan-Delawanna, Inc., cited the trend towards the use of more synthetic products in perfumery. The early resistance to this practice is being progressively replaced by a serious and determined effort to expand the uses of synthetics, Mr. Saunders said.

Dr. Paul Z. Bedoukian, a consultant, observed that an enormous volume of chemical research underlies today's large-scale production of widely diversified synthetic odorants. As an example, he pointed out that at present the large-scale manufacture of synthetic linalool opens a new era, for many of the aliphatic materials up to now supplied only as isolates from essential oils can now be synthesized.

Dr. Amos Turk, a consultant, said that methods available for domestic odor control include catalytic oxidation (for cook-

—*Continued on page 55*

The Satisfied Consumer

CANDIDATE FOR PYRILAMINE MALEATE

Pyrilamine answers important needs for antihistamine therapy because of outstanding effectiveness and compatibility with a variety of other pharmaceuticals.

"SURE IT'S GOOD—THOUSANDS USE IT"

Pyrilamine is the most favored antihistamine, employed in more formulations and by more manufacturers than any other antihistamine today.

ROAD TO RECOVERY

Pyrilamine is a superior antihistamine. It is remarkably well tolerated, the occurrence of drowsiness in particular being notably low.

THE SATISFIED CONSUMER

And you, too, will be satisfied with Pyrilamine, whether formulated in cold tablets, cough syrups, nasal preparations, ointments, lotions or creams. Check your Merck representative for the details.

PYRILAMINE MALEATE MERCK

builds acceptance for antihistamine formulations

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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, March 22 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Abies siberica oil, cns. lb. 4.25 - 5.00
Abietic acid, coml., dms., c.l., works lb. .12 - —
dms., l.c.l., ex whse lb. .1490- —
Cryst., dms., c.l., works lb. .06½- —
dms., l.c.l., works lb. .07 - .07½
Acacia (see Arabic gum).
Acenaphthene, below 92.5 C. m.p., dms., works lb. .40 - —
Above 92.5 C. m.p., bbls., dms., lb. .41 - .50
Acetaldehyde, 99%, dms., c.l., works. lb. .12 - —
dms., l.c.l., works lb. .13½- —
tanks, works lb. .10 - —
Acetaldol (see Aldol).
Acetanilide, tech., flaked, bbls., bgs., c.l., frt. alld lb. .30½- —
bbls., bgs., ton lots, frt. alld. lb. .31½- —
bbls., bgs., smaller lots, frt. alld lb. .34½- —
USP, bbls., 2,000-lb. lots lb. .79 - —
bbls., smaller lots lb. .80 - .81
Acetic acid, coml, or redist, 28%, bbls. 100 lbs. 4.80 - —
56%, bbls. 100 lbs. 8.25 - —
70%, bbls. 100 lbs. 9.95 - —
80%, bbls. 100 lbs. 10.45 - —
Acetic acid, glacial, syn., CP, dms., dlvd. 100 lbs. 22.00 -23.00
tech., dms., c.l., dlvd. 100 lbs. 13.75 - —
dms., l.c.l., dlvd 100 lbs. 14.25 - —
tanks, dlvd. 100 lbs. 10.00 - —
USP, cbys., incl., dlvd 100 lbs. 31.00 -32.00
Acetic anhydride, aluminum ret. dms., c.l., dlvd. E lb. .15½- —
aluminum ret. dms., l.c.l., dlvd. E. lb. .17 - —
tanks, dlvd. E. lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd lb. .80 - —
fib. dms., l.c.l. dlvd. lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., c.l., dlvd lb. 1.35 - —
fib. dms., l.c.l., dlvd lb. 1.36 - —
Acetoacet-o-toluidide, fib. dms., c.l., dlvd lb. .82 - —
fib. dms., l.c.l., dlvd lb. .83 - —
Acetone, CP, dms., c.l., dlvd lb. .10½- —
dms., l.c.l., dlvd lb. .11½- —
tanks, dlvd. lb. .08 - —
Acetonitrile, dms., c.l., works lb. .45 - —
dms., l.c.l., works lb. .47 - —
Acetophenetidin, USP, bbls., works, frt. equald lb. 1.22 - 1.24
Acetophenone, cns., dms. lb. 1.21 - 1.85
Tech., dms., l.c.l., works lb. .75 - —
N-Acetyl-p-aminophenol, dms., frt. adjusted lb. 1.75 - 1.85
Acetylene black, imp., bgs., c.l., duty and freight extra lb. .19 - —
cs., l.c.l., ex whse lb. .24½- .30
Acetylsalicylic acid, USP, special, makers, primary distrib., bbls., 1,000-lb. lots, point of shipt lb. .63 - —
USP, standard, fine, cryst. gran., (30-40 mesh) powd., (80 mesh), bbls., 1,000-lb. lots, same basis lb. .58 - —
Freight equald, shipt identical quantity over standard routes, from N. Y., Phila., Midland, Mich., Chicago and St. Louis.
Acetyltributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .36 - —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .35 - —
tanks, frt. alld. E. of Denver. lb. .33 - —
Acetyltriethyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .39 - —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .40 - —
tanks, frt. alld. E. of Denver lb. .37 - —
Acetyltri-2-ethylhexyl citrate, non-ret. dms., frt. alld lb. .60 - —

Acids

Acid quotations, formerly grouped under one heading, are now listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.

Aconite root, bls. lb. .50 - .55
Acrolein, tech., dms., c.l., works lb. .47 - —
dms., l.c.l., works lb. .47½- —
tanks, works lb. .46 - —
Acrylonitrile, dms., c.l., t.l., frt. equald lb. .30 - —
dms., l.c.l., l.t.l., frt. equald lb. .31 - —
tanks, frt. equald lb. .27 - —
ACTH, cryst., bulk, 1,000 units gram, bots. gram 15.00 - —
Adeps lanae (see Lanolin).

Abies Siberica Oil—Ammonium Benzoate

Adipic acid, bgs., c.l., dlvd. lb. .32 - —
bgs., l.c.l., dlvd. lb. .34¾- —
Adrenocorticotropic hormone (see ACTH).
Agar, USP, Kobe No. 1, strip, bls. lb. 2.00 - 2.20
powd., 30 mesh., fib., dms. lb. 2.50 - —
dl-Alanine, dms., works lb. 8.50 -11.00
Albumin, blood, dark (see Blood, dried, soluble).
light, dms. lb. .65 - .85
Egg, edible, cryst., powd., bbls. lb. 1.40 - 1.42
flake lb. 1.36 - 1.38
tech., cryst., bbls. lb. 1.08 - 1.10

Alcohols

Alcohol quotations, formerly grouped under one heading, are now listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Aldol, 95%, dms., works lb. .23 - —
Denaturing grade, dms. gal. 2.15 - —
Aldrin, tech., fib. dms., c.l., t.l., dlvd. lb. .90 - —
fib. dms., l.c.l., dlvd. lb. .95 - 1.05
Aletris root, bgs. lb. 1.75 - 1.85
Algin (see Sodium alginate).
Alizarine (see 1,2-Dihydroxy anthraquinone).
Alkali blue dry, 250-lb. bbls., dlvd. N. of Tenn. and N.C., E. of Miss. R. including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis. lb. 2.25 - —
Alkali blue toner, litho flushed, 125-lb. bbls., same basis. lb. 1.28 - —
Alkali blue dlvd. prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N.C., S.C., Tenn., Tex. (El Paso 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equald. with Chicago.
Allethrin, 90%, dms., frt. alld lb. 28.80 -28.90
Soln., 20%, dms., 200-2,000 lb. lots, frt. alld lb. 6.50 - 6.55
2½%, dms., frt. alld. lb. .95 - 1.10

Abbreviations

Used in OPD Market Quotations

alld.	allowed	dms.	drums	No.	number
amorph.	amorphous	dom.	domestic	nom.	nominal
AMP	American melting point	E.	east	o-	ortho
anhyd.	anhydrous	e.p.	end point	ord.	ordinary
a.p.a.	available phosphoric acid	equald.	equalized	oz.	ounce
approx.	approximately	exp.	expressed	p-	para
artif.	artificial	F.	fahrenheit	Pac.	Pacific
ASTM	American Society for Testing Materials	ferment.	fermentation	pf.	proof
Atl.	Atlantic	f.f.a.	free fatty acid	phos.	phosphate
Be.	Baume	f.f.c.	free from chlorine	photo.	photographic
bbls.	barrels	fib.	fiber	pkgs.	packages
bgs.	bags	f.o.b.	free on board	powd.	powdered
bls.	bales	f.p.a.	free of prussic acid	precip.	precipitated
bots.	bottles	frt.	freight	prod.	producer
b.p.	boiling point	gal.	gallon	pt.	point
b.p.l.	bone phosphate of lime	gran.	granular	pulv.	pulverized
b.r.	boiling range	grd.	ground	purif.	purified
bxs.	boxes	i.&a.	iron and aluminum	redist.	redistilled
C.	centigrade	i.b.p.	initial boiling point	refd.	refined
cbys.	carboys	imp.	imported	refy.	refinery
CD	completely denatured	incl.	included	reg.	regular
c.i.f.	cost, insurance, freight	indust.	industrial	resub.	resublimed
cks.	casks	kgs.	kegs	ret.	returnable
c.l.	carlots	l-	laevo	SD	specially denatured
cns.	cans	lacq.	lacquer	s.d.	single distilled
coml.	commercial	lb.	pound	S. E.	southeast
conc.	concentrated	l.c.l.	less than carlots	sec.	secondary
CP	chemically pure	l.t.l.	less truckload	secs.	seconds
cps.	centipoises	liq.	liquid	s.g.	specific gravity
cryst.	crystalline	mfrs.	manufacturers	shipt.	shipment
cs.	cases	m-	meta	soln.	solution
ctns.	cartons	m.a.p.	mixed aniline point	s.u.	standard unit
cyls.	cylinders	min.	minimum	syn.	synthetic
d-	dextro	m.p.	melting point	tanks.	railroad tankcars
dbl.	double	N-	nitrogen	tech.	technical
denat.	denatured	n-	normal	tert-	tertiary
dest-dist.	destructively—distilled	nat.	natural	t.l.	truck loads
dl-	dextrolaevo	neut.	neutral	t.w.	tank wagons
dist.	distilled	NF	National Formulary	USP	U. S. Pharmacopoeia
distr.	distributor	NNR	New and Nonofficial Remedies	vis.	viscosity
djns.	demijohns			VM&P	varnish makers & painters
dlvd.	delivered			W.	west
				whse.	warehouse
				w. w.	water-white

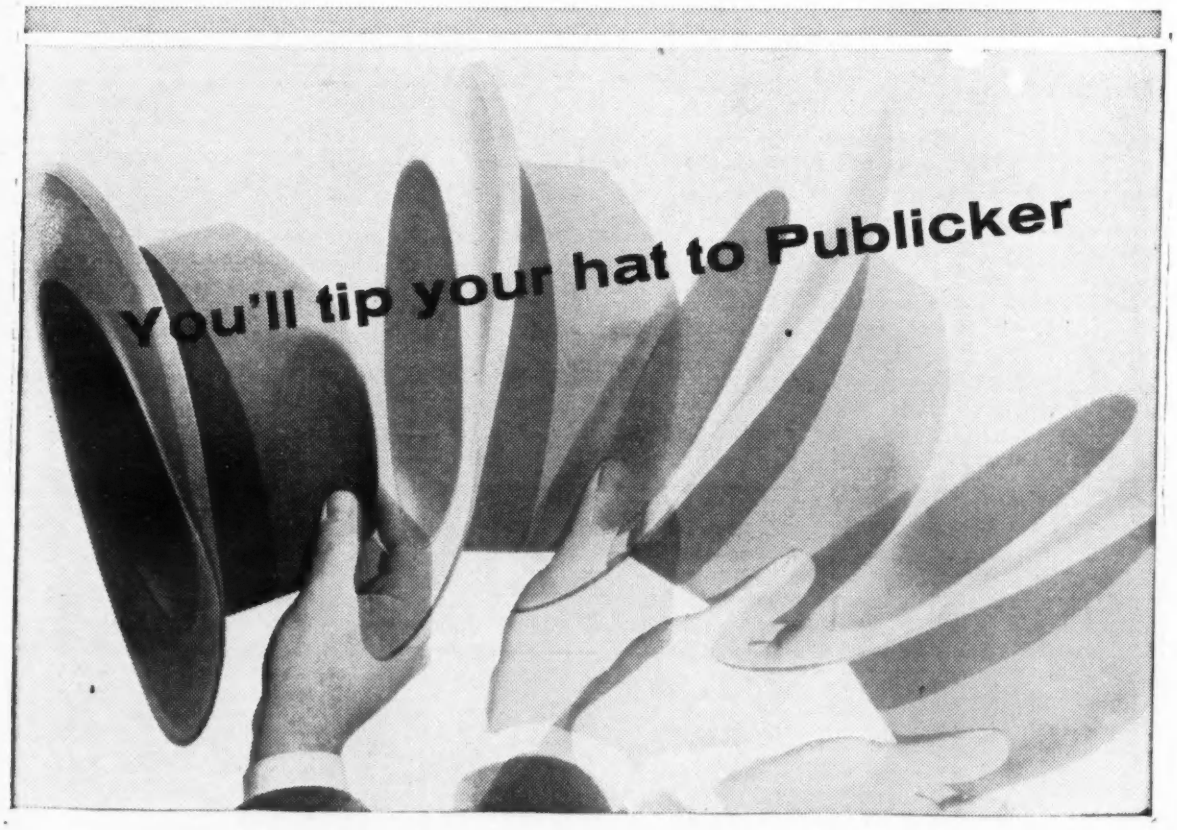
A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Allspice oil (see Pimento oil).
Allyl alcohol, dms., c.l., dlvd. lb. .32¼- —
dms., l.c.l., dlvd. lb. .33½- —
tanks, dlvd. lb. .30 - —
Allyl bromide, 55-lb. cbys., 5,000 lbs. or more, works lb. 1.40 - 1.47
55-lb. cbys., 1,045 to 4,950 lbs., works lb. 1.43 - 1.52
55-lb. cbys., 55 to 990 lbs., works. lb. 1.50 - 1.57
Allyl chloride, dms., c.l., dlvd. lb. .17½- —
dms., l.c.l., dlvd. lb. .18½- —
tanks, dlvd. lb. .15 - —
Almond oil, artif., bitter (see Benzaldehyde).
Almond oil, nat., bitter, f.p.a., bots. lb. 3.00 - 3.75
NF, bots. lb. 3.25 - 3.75
USP, sweet, cns., dms. lb. 1.45 - 1.50
Aloe, Cape, cs. lb. .50 - —
powd., cs. lb. .65 - —
Curacao, kgs. lb. .60 - —
Aloin, USP, bbls., dms., kgs. lb. 3.50 - 3.75
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphaapicoline (see a-Picoline).
Alphaterpineol (see a-Terpineol).
Alphatocopherol (see a-Tocopherol).
Alum, ammonium, gran., bgs., works 100 lbs. 4.30 - —
lump, dms., works 100 lbs. 5.05 - —
powd., dms., works 100 lbs. 5.20 - —
USP, burnt, dms. lb. .20 - .21
hydrous, dms. lb. .07¾- .08
Alum, potassium, gran., bgs., works. 100 lbs. 4.55 - —
lump, dms., works 100 lbs. 5.30 - —
powd., dms., works 100 lbs. 5.45 - —
USP, burnt, dms lb. .20 - .21
hydrous, dms lb. .07¾- .08
Alum, potash-chrome, dms lb. .17 - —
Alumina, calcined, bgs., c.l., works. lb. .0455- —
bgs., l.c.l., works lb. .048 - .0755
Aluminum acetate, basic soln., 24%, bbls., l.c.l., works lb. .14 - —
Aluminum chloride, coml., anhyd., dms., c.l., works, frt. equald lb. .16 - —
dms., l.c.l., works, frt. equald. lb. .16½- —
cryst., dms., c.l., works 100 lbs. 16.00 - —
dms., l.c.l., works 100 lbs. 16.50 - —
soln. 32°, cbys., c.l., works lb. .0445- —
cbys., l.c.l., works lb. .0520- .1290
tanks, works 100 lbs. 3.45 - —
NF, gran., dms., works lb. .29 - .30
Aluminum fluoride, tech., anhyd., bgs., c.l., works lb. .16¾- —
bgs., l.c.l., works lb. .17¾- .19¾
Aluminum fluoride in fib. dms. 0.35c. per lb. higher.
Aluminum formate, basic soln., dms., c.l., works lb. .12 - —
dms., l.c.l., works lb. .12½- —
Aluminum hydrate, heavy, bgs., c.l., frt. equald lb. .032 - —
bgs., 20,000-40,000 lb. lots, same basis lb. .0345- —
bgs., 2,000-20,000 lb. lots, same basis lb. .0445- —
bulk, same basis lb. .0295- —
Aluminum hydroxide, dried, USP XV, fib. dms. works lb. .82½- —
fib. dms., contract, works lb. .79½- —
Gel, pharmaceutical, 14-15% Al_2O_3, fib. dms., works lb. .22 - —
fib. dms., contract works lb. .21 - —
9-9½% Al_2O_3, fib. dms., works lb. .19 - —
fib. dms., contract, works lb. .18 - —
Aluminum hydroxide, tech., powd. (See Aluminum hydrate).
Aluminum metal, 99%+, ingots, 10,000-lb. lots, frt. alld lb. .2710- —
pigs, 10,000-lb. lots, frt. alld. lb. .2500- —
Aluminum oxide, amorphous (see Alumina, calcined).
Aluminum paste, lining, extra-fine, dms lb. .68 - —
Standard grade, dms lb. .48 - —
Aluminum powder, lining, extra-fine, dms lb. 1.09 - —
Standard grade, dms lb. .78½- —

Aluminum paste and powder prices are f.o.b. shipping point. Add 1c. per lb. for 100-lb. dm., 1½c. per lb. for 50-lb. dm., 3c. per lb. for 10 lb. can and 5c. to 12c. per lb. for smaller containers. Deduct 1c. per lb. for single shipment of 400 to 1,499 lbs., 2c. for 1,500 to 4,999 lbs., 3c. for 5,000 to 24,999 lbs. and 4c. for 30,000 lbs. or more. Where destination is within the continental U. S. a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs. or over.

Aluminum resinate, precip., 2.1% Al, dms lb. .33 - —
Aluminum stearate, dibasic, ctns., c.l. lb. .39 - —
ctns., l.c.l lb. .40 - .44
Monobasic, ctns., c.l lb. .39 - —
ctns., l.c.l lb. .40 - .44
Tribasic, ctns., c.l lb. .39 - —
ctns., l.c.l lb. .40 - .44
Aluminum sulfate, coml., bulk, c.l., works 100 lbs. 1.85 - —
grd., bgs., c.l., works ton 37.00 - —
lump, bgs., c.l., works ton 40.00 - —
Iron-free, bgs., c.l., works, frt. equald 100 lbs. 3.55 - —
bgs., l.c.l., works, frt. equald. 100 lbs. 3.95 - 4.55
USP, gran., dms., works lb. .29 - .30
powd., dms., works lb. .36 - .37
Aluminum sulfate prices $1 per ton higher in the South.
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots. oz. 8.00 -10.00
p-Aminoacetanilide, frt. alld. lb. 1.57 - —
Aminoacetic acid, NF, bbls., frt. adjusted lb. 1.50 - 1.75
Aminoazotoluene base, bbls., 100% basis lb. 1.03 - 1.16
p-Aminobenzoic acid, tech., dry, dms., works lb. 1.74 - 1.77
USP, dms., 1,000-lb. lots or more, works lb. 2.60 - —
dms., smaller lots, works lb. 2.65 - 2.75
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted lb. 3.70 - —
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .475 - —
dms., l.c.l., dlvd. lb. .483 - —
tanks, dlvd. lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb. .44 - —
dms., l.c.l., frt. alld. lb. .45 - —
tanks, frt. alld lb. .42 - —
m-Aminophenol, dist., dms., ton lots. lb. 2.05 - —
dms., smaller lots lb. 2.50 - —
p-Aminophenol, dms., frt. alld lb. 1.15 - —
Aminophylline, USP, 100-lb. dms lb. 3.55 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald ton 80.00 - —
refrigeration tanks works, frt. equald ton 82.50 - —
Aqueous, tanks, works, anhyd. basis ton 83.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal, gray, bgs., c.l., works, frt. equald 100 lbs. 8.25 - —
bgs., l.c.l., same basis 100 lbs. 9.25 - —
Ammoniac, sal., white (see Ammonium chloride, tech.).
Ammonium acetate, purif., dms lb. .41 - —
Ammonium benzoate, USP, dms., kgs., 4,000-lb. lots, frt. alld. lb. .80 - —
dms., kgs., smaller lots, frt. alld. lb. .81 - 1.08

Ammonium biborate, gran., dms., c.l., works ... ton.319.50 • —
dms., ton lots, ex whse ..ton.397.00 • —
dms., smaller lots, ex whse ..ton.402.00 • —
Ammonium bicarbonate, dom., dms., c.l., works..100 lbs. 7.00 • —
dms., l.c.l., works .....100 lbs. 9.00 • —
Ammonium bichromate, dms., works, lb. .42 - .43
Ammonium bifluoride, dms., dlvd lb. .2145- .2245
Ammonium bromide, NF, gran., bbls, lb. .45 • —
Powdered ammonium bromide 10c. per lb. higher.
Ammonium chloride, USP, lump, dms lb. .16 • —
Ammonium chloride, tech., fine gran., bgs., c.l., works .. 100 lbs. 5.75 • —
l.c.l., works ..... 100 lbs. 7.75 - 8.20
USP, gran., bbls., dms. .....lb. .17¼- —
Ammonium citrate, dibasic, bbls lb. .77 - —
Ammonium dichromate (see Ammonium bichromate).
Ammonium fluoride (see Ammonium bifluoride).
Ammonium hydroxide (see Ammonia acqueous).
Ammonium hypophosphate NF, dms. lb. 3.07 • —
Ammonium iodide, NF, dms., bots, lb. 4.26 - 4.38
Ammonium linoleate, 80%, dms., works lb. .50 • .55
Ammonium nitrate, dom., fertilizer grade, 33.5% N, bgs., western works, frt. equald, base price ..ton.64.00 • —
Ammonium nitrate, imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point, frt. equald to $8 ton base price ..ton.64.00 • —
August discount .....ton. 5.00 • —
western, bgs., c.l., f.o.b. cars, Los Angeles ..ton.79.69 • —
with dolomite, 20.5% N, bgs., Hopewell, Va ..ton.51.00 • —
Ammonium oxalate, fine gran., dms. lb. .26½- .31
Ammonium pentaborate, gran., bgs., c.l., works ..ton.187.50 • —
bgs., ton lots, ex whse .....ton.273.50 • —
bgs., smaller lots, ex whse ..ton.278.50 • —
Ammonium pentaborate powder $10 per ton higher.
Ammonium Persulfate, tech., dms., 10-ton lots or more, works. lb. .18 • —
dms., smaller lots, works .. lb. .20 • .23
Ammonium phosphate, coml., bgs., c.l., works, frt. equald ..lb. .09¼- —
bgs., l.c.l., same basis .....lb. .10 • —
Dibasic, NF, V bbls., dms .. lb. .46 • —
Tech, bgs., c.l., works, frt. equald. lb. .09¼- —
bgs., l.c.l., same basis ..... lb. .10 • —
Ammonium silicofluoride, dms., works ..lb. .11¾- .13¼
Ammonium sulfamate, bgs., c.l., t.l., works ..lb. .19 • —
bgs., l.c.l., works .....lb. .20½- —
Ammonium sulfate, coke-oven, bulk, producing ovens, base price ..ton.32.00 • —
purif., dms., works .....lb. .10 • .10½
syn., bulk, c.l., works .....ton.32.00 -42.00
Ammonium sulfide, liq., 40-44%, tanks, frt. equald., 100% basis ..ton.160.00 • —
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate).
Ammonium thiocyanate, tech., dms., c.l., works ..lb. .20 • —
dms., l.c.l., works .....lb. .22 • .26
Ammonium thioglycalate, coml., cbys., 100% basis .....lb. 1.35 • 1.65
Highly purif., cbys., 100% basis. lb. 1.70 • 1.96
Ammonium thiosulfate, cryst., photo grade, fib. dms., frt. alld ..lb. .65 • —
d-Amphetamine hydrochloride, di-basic ..bots.18.00 -28.00
Monobasic, bots. .....lb.18.00 -28.00
de-Amphetamine hydrochloride, di-basic bots.lb. 4.50 • 6.00
dl-Amphetamine phosphate, fib. bots.18.00 -28.00
d-Amphetamine sulfate, fib. dms., dms ..lb. 4.50 • 6.00
d-Amphetamine sulfate, dib. dms. lb.18.00 -28.00
dl-Amphetamine sulfate, fib. dms., lb. 4.50 • 6.00
Amyl acetate, ex fusel oil, tech., dist. from 125° to 150°C., dms., c.l., frt. alld. E. of Rockies ..lb. .18½- —
dms., l.c.l., same basis ....lb. .19½- —
tanks, same basis .....lb. .16 • —
Ex pentane, reg. dms., c.l., dlvd. lb. .18½- —
dms., l.c.l., dlvd .....lb. .19½- —
tanks, dlvd. .....lb. .16 • —
Amyl acetate, syn., oxo process, dms., c.l., dlvd ..lb. .20¼- —
dms., l.c.l., dlvd .....lb. .21¼- —
tanks, dlvd. .....lb. .17¾- —
Tech., dms., c.l., dlvd .....lb. .16½- —
dms., l.c.l., dlvd .....lb. .17½- —
tanks, dlvd. .....lb. .14 - —
Amyl alcohol, ex fusel oil (see Fusel oil, refd.),
Amyl alcohol, ferment., refd., 128°-132°C., dms., l.c.l., dlvd ..lb. .43 • —
refd., ACS grade, dms., l.c.l., dlvd ..lb. .45 • —
Ex-pentane, mixed amyls, dms., c.l., frt. alld ..lb. .18½- —
dms., l.c.l., frt. alld .....lb. .19½- —
tanks, frt. alld .....lb. .16 - —
primary, dms., c.l., frt. alld. lb. .19¾- —
dms., l.c.l., frt. alld .....lb. .20¾- —
tanks, frt. alld .....lb. .17¾- —
sec-synthetic, dms., c.l., works, frt. alld ..lb. .19 - —
dms., l.c.l., works .....lb. .20 - —
tanks, works .....lb. .17 - —
tert-synthetic, dms., c.l., frt. alld. E ..lb. .18½- —
dms., l.c.l., frt. alld E .....lb. .19½- —
tanks, frt. alld. E .....lb. .16 - —
Amyl alcohol, 1-pentanol (syn. normal), dms., c.l., works ..lb. .41½- —
dms., l.c.l., works .....lb. .42½- —
tanks, works .....lb. .39½- —
2-Pentanol, dms., c.l., works ....lb. .65 - —
dms., l.c.l., works .....lb. .70 - —
tanks, works .....lb. .60 - —
Amyl n-butyrate, dms .....lb. 1.00 - 1.25
Amyl nitrate, USP, bots .....lb. 1.75 - 1.83
Amyl salicylate, cns., dms .....lb. .82 - 1.10
o-tert-Amyl phenol, dms., c.l., works. lb. .49½- —
dms., l.c.l., works .....lb. .50½- —
tanks, works .....lb. .47 - —
p-tert-Amyl phenol, dms., c.l. works. lb. .26¾- —
dms., l.c.l., works .....lb. .27¾- —
tanks, works .....lb. .25¾- —
Amyris oil, dms .....lb. 1.25 - —
Anethole, cns., dms .....lb. 1.60 - 1.80
Tech., dms .....lb. 1.10 - 1.15
Angelica root, dom., bls .....lb. .80 - .90
Angelica root oil, bots .....lb.85.00 -100.00
Angelica seed oil, bots .....lb.80.00 -95.00
Aniline, dms., c.l., frt. alld .....lb. .22 - —
dms., l.c.l., frt. alld .....lb. .23 - —
tanks, frt. alld .....lb. .20 - —
tankwagons, min. 2,000 gals ....lb. .20½- —
Aniline oil (see Aniline).
Aniline salt, dms., c.l., truckloads, 20,000 lbs. min., frt. alld. lb. .33 - —
dms., l.c.l., same basis .....lb. .35 - —
Anise oil, USP, dms .....lb. 2.75 - 3.50
Anise seeds, Mexican, bgs .....lb. .25 - —
Spanish, bgs .....lb. .25 - —
Syrian, bgs .....lb. .25 - —
Anisic aldehyde, bots., dms .....lb. 1.95 - 2.70
o-Anisidine, dms., c.l., frt. alld ..lb. .80 - —
dms., l.c.l., same basis .....lb. .82 - —
tanks, same basis .....lb. .78 - —
p-Anisidine, dms., works .....lb. .97 - —
Annatto seed, whole, bgs. ....lb. .15 - .17
Anthracene, 90-95%, bbls., ton-lots, works ..lb. .83 - —
bbls., smaller lots, works ....lb. .95 - —
Anthranilic acid, 99%, 150-lb. dms., dlvd ..lb. 1.15 - —
Anthraquinone, 99.5%, bbls., c.l., frt. alld ..lb. .83 - —
bbls., l.c.l., same basis .....lb. .86 - —
Electrical grade, bbls., l.c.l., same basis ..lb. .91 - —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines . lb. .33 - —
cs., c.l., mines .....lb. .33½- —
Antimony oxide, bgs., c.l., frt. alld. lb. .27 - —
bgs., l.c.l., frt. alld. .....lb. .28½- —
Antimony sulfide, approx. 65%, bgs., dlvd lb. .23 • .26
Antimony trichloride, anhyd., solid, pails, c.l., works ..lb. .41 - —
pails, l.c.l., works .....lb. .43 - —
Antimony-potassium tartrate, tech., powd., dms ..lb. .69½- .74½
USP, powd., dms. .....lb. .74½- .75½
Antipyrine, NF, 200-lb. bbls. ....lb. 3.50 • —
Apomorphine hydrochloride USP 25-oz. lots ..oz.35.60 • —
Apricot kernel oil USP, dms ....lb. .75 • .90
Arabic gum, amber, sorts, bgs. ..lb. .21 • .23
USP, powd., bbls. .....lb. .27 • .29
Areca nuts, powd., bbls. .....lb. .13 • —
Arecoline hydrobromide, NF, bots., tins oz. 4.50 • 6.00
l-Arginine monohydrochloride, dms., 1 kilo lots kilo.74.80 • —
Arnica flowers (true Montana), bls. lb. 2.25 • —
Arsenic, crude (95%), bulk, c.l., works ..lb. .016 • —
bbls., c.l., works .....lb. .031 • —
Arsenic trioxide, USP, dms. ....lb. .48 • —
Arsenic, white, powd., bbls., c.l., works ..lb. .04½- —
bbls., l.c.l., works .....lb. .06½- .07½
Arsenous acid, tech (see Arsenic, white).
Arsenous acid, USP (see Aresnic trioxide).
Arylih maroons, deep shades, bbls. lb. 3.70 • —
Light shades, bbls .....lb. 2.85 • —
Maroon shade, bbls .....lb. 3.70 • —
Asafetida, cn .....lb. .40 • —
Powd., bbls., dms .....lb. .85 • —
Asbestine (see Talc, fibrous, New York).
Asbestos, Canadian crude,
6D, c.l. (30 tons), mines ..ton.82.00 • —
7D, c.l. (30 tons), mines ..ton.72.00 • —
7F, c.l. (30 tons), mines ..ton.68.25 • —
7H, c.l. (30 tons), mines ..ton.58.00 • —
7K, c.l. (30 tons), mines ..ton.48.30 • —
7M, c.l. (30 tons), mines ..ton.42.00 • —
7R, c.l. (30 tons), mines ..ton.41.00 • —
7RF, c.l. (30 tons), mines.ton.42.00 • —
7T, c.l. (30 tons), mines ..ton.39.00 • —
7TF, c.l. (30 tons), mines.ton.42.00 • —
Asbestos prices are in US funds; l.c.l. lots $4 per ton higher.
Ascorbic acid, USP, dms., 25-100 kilo lots ..kilo.12.00 • —
dms., 10-kilo lots .....kilo.12.35 • —
dms., 5-kilo lots .....kilo.12.75 • —
bots., 1-kilo lots .....kilo.13.00 • —
bots, 500-gram lots .....kilo.13.50 • —
Ash black (see Barium sulfide).
Asphalt gilsonite, black jet, bgs., c.l., mines ..ton.40.00 • —
seconds, 300°-390°F. fusing pt., bgs., c.l., mines ..ton.35.00 • —
select, 350° F. fusing pt., bgs., c.l., mines ..ton.41.00 • —
270°-295° F. fusing pt., bgs. c.l., mines ..ton.40.00 • —
Manjac, No. 10, crude, dms., works ..lb. .06¼- —
Petroleum, cut-back, tanks, tank-wagon, refy ..gal. .09 • —
emulsion, tanks, tankwagon, refy. gal. .09½- —
steam-refd., 50-80 penetration, tanks, tankwagon, refy ..ton.21.00 • —
85-300 penetration, tanks, tank-wagon, refy ..ton.20.00 • —
Aspirin (see Acetylsalicylic Acid).
Atropine, USP, bots .....oz. 3.90 - 4.50
Atropine sulfate, USP, bots .....lb. 2.10 - 2.55
Avocado oil, cns .....lb. 3.25 • —



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★ *Ethyl Alcohol* ★ *Ethyl Acetate*
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★ *Butyl Acetate* ★ *Acetone*
★ *Acetaldehyde* ★ *Acetic Acid*
★ *Refined Fusel Oil*

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B

Bacitracin, bulk, 1,000,000,000 or more units 50,000 units. .65 - —
less than 1,000,000,000 units. 50,000 units. .70 - —
Balm of Gilead buds, dried, bgs..lb. 1.35 - 1.45
Barberry root bark, bgs.....lb. .28 - .30
Barbital, NF, 100-lb. dms.....lb. 4.50 - —
Barbital sodium, NF, dms.....lb. 4.75 - —
Barium carbonate, precip., bgs., c.l., works..ton.104.00 - —
smaller lots, works ....ton.114.00 - —
Barium chlorate, dms., works... lb. .32 - .41
Barium chloride, anhyd., bgs., c.l., works..ton.172.00 - —
bgs., l.c.l., works .....ton.182.00 - —
NF, cryst., 100-lb. dms ..... lb. .22 - —
Tech., cryst., bgs., c.l., works, 100 lbs. 6.80 - —
bgs., l.c.l., works .....100 lbs. 7.30 - —
Barium chromate, bgs., frt. equald. lb. .35 - —
Barium dioxide (see Barium peroxide).
Barium hydrate, cryst., bgs., c.l., t.l., frt equald..ton.208.00 - —
bgs., l.c.l., l.t.l., frt. equald..ton.218.00 - —
Barium monoxide (see Barium oxide).
Barium nitrate, bbls., c.l., t.l., dlvd. lb. .16 - —
bbls., l.c.l., l.t.l., dlvd ... .. lb. .17 - —
Barium oxide, grd., dms., c.l., t.l., frt. equald..ton.275.00 - —
dms., l.c.l., l.t.l., frt. equald ton.285.00 - —
Barium peroxide, dms., frt. equald.lb. .20 - —
Barium stearate, ctns., c.l., frt. alld. lb. .41 - —
ctns., l.c.l., same basis . ... lb. .42 - .46
Barium sulfate, tech. (see Baryites and blanc fixe).
Barium sulfate, dms..... lb. .15 - .15½
Barium sulfide, dms., c.l., works.ton.95.00 - —
dms., l.c.l., works ..... ton.105.00 - —
Barytes, southern, off-color, bgs., mines..ton.25.00 - —
95-75%, bgs., mines ..ton.25.00 - —
water-grd., paper bgs., c.l., St. Louis..ton.49.00 - —
paper bgs., c.l., ex whse, New York..ton.70.85 - —
Battery acid, cbys., c.l., works, E. 100 lbs. 2.35 - —
cbys., l.c.l., works, E.....100 lbs. 2.65 - 3.45
Bauxite, bulk, mines..... ton. 6.75 -10.00
Bay leaves (see Laurel leaves).
Bay oil, NF, Puerto Rican, 50-55%, cns..lb. 2.15 - 3.00
Puerto Rican, 55-60%, cns... lb. 2.50 - 3.00
West Indian, 50-55%, cns., dms., lb. 1.85 - 2.40
Bayberry wax, bgs .....lb. .45 - .47
Beeswax, crude, African, bgs....lb. .67 Nom.
Brazilian, bgs .....lb. .69 Nom.
Central American, bgs.....lb. .68 Nom.
Chilean, bgs.....lb. .69 Nom.
Refd., USP, bleached, white bricks, 100-lb. ctns ...lb. .79 - .86
white slabs, 100-lb. ctns...lb. .77 - .85
yellow bricks, 100-lb. ctns....lb. .69 - .76
yellow slabs, 100-lb. ctns.....lb. .68 - .75
Belladonna leaf, bls.....lb. .35 - .37
Belladonna root, bls.....lb. .45 - .50
Bentonite, dom., 200 mesh, bgs., c.l., mines..ton.14.00 - —
Imp., Italian, white, high gel., bgs., 5-ton lots, ex whse..ton.84.00 - —
bgs., 1-ton lots, ex whse.ton.87.00 - —
low gel., bgs., 5-ton lots, ex whse..ton.82.35 - —
bgs., 1-ton lots. ex whse.ton.85.35 - —
Benzal chloride, cbys., works....lb. .44 - —
Benzaldehyde, NF, dms.....lb. .74 - 1.05
Tech., cbys., dms., t.l.....lb. .43 - —
cbys., smaller lots.....lb. .44 - —
Benzene, coaltar, pure or nitration, tanks, works:—
Bethlehem, Pa .....gal. .36 - —
Birmingham district.....gal. .36 - —
Chicago district .....gal. .36 - —
Cleveland district.....gal. .36 - —
Geneva, Utah .....gal. .36 - —
Johnstown, Pa .....gal. .36 - —
Lackawanna, N. Y.....gal. .36 - —
Lone Star, Tex.....gal. .36 - —
Lorain, Ohio .....gal. .36 - —
Middletown, Ohio.....gal. .36 - —
Minnequa, Colo .....gal. .36 - —
Philadelphia district.....gal. .36 - —
Pittsburgh district .....gal. .36 - —
Sparrows Point, Md.....gal. .36 - —
Syracuse, N. Y .....gal. .36 - —
Terre Haute, Ind.....gal. .36 - —
Youngstown, Ohio..... gal. .36 - —
Benzene, petroleum, Houston, Tex., tanks..gal. .36 - .38
Benzene hexachloride, 25% and 99% gamma isomer (see Lindane).
Benzene hexachloride, tech., high gamma, dms., c.l., dlvd. gamma unit-lb. .0075- .008
dms., l.c.l., works gamma unit-lb. .009 - .0095
low gamma, dms., c.l., dlvd. gamma unit-lb. .0075- —
dms., l.c.l., works...gamma unit-lb. .009 - —
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis lb. 1.19 - —
bbls., l.c.l., same basis .....lb. 1.21 - —
Benzidine sulfate, tech., frt. alld., 100% basis lb. 1.21 - —
Benzidine yellow, AAA, bbls., dlvd. lb. 2.20 - —
AAOT, bbls., dlvd .....lb. 2.45 - —
Lightfast, bbls., dlvd.....lb. 3.25 - —
Benzocaine, dms.....lb. 3.48 - 3.50
Benzoic acid, tech., bbls., dms., 100-lb. lots or more .lb. .44 - —
USP, bbls., dms., 100-lb. lots or more..lb. .54 - —
Benzoin gum, Sumatra, cs .....lb. .33 - —

Benzol

Benzol quotations, both coaltar and petroleum, may now be found under Benzene.

Benzophenone, dms .....lb. 1.40 - 1.70
Benzotriazole, tech., dms., 1,000-lb. lots, works lb. 2.25 - —
Benzotrichloride, cbys., 1,000-lb. lots or more, frt. equald lb. .18 - —
cbys., smaller lots, frt. equald.lb. .20 - —
Benzoyl chloride, cbys., dms., c.l., works, frt. equald..lb. .22 - —
cbys., l.c.l., same basis .....lb. .23 - —
tank trucks, dlvd. Metropolitan area lb. .21 - —
Benzoyl peroxide, purif., fib. dms., 50 to 1,000-lb. lots, works..lb. .98 - 1.08
Benzyl acetate, f.f.c., cns., dms..lb. .60 - 1.00
Benzyl alcohol, NF, dms..... lb. .64 - .79
Tech., dms., dlvd. ..... lb. .47½- .49
Benzyl benzoate, NF, f.f.c., 500-lb. dms lb. .62 - —
Benzyl chloride, tech., 13-gal cbys., dms., c.l., works, frt. equald lb. .23 - —
13-gal cbys., dms., l.c.l., same basis lb. .24 - —
tank trucks, dlvd. Metropolitan area..lb. .21 - —

A 2½c. differential is quoted on benzyl chloride in 5-gal. cbys. In steel dms. prices are ½c. lower.

Benzyl cinnamate, cns.....lb. 3.60 - 3.90
Benzyl dimethylamine, dms., works. lb. 2.25 - —
Benzyl formate, cns. .....lb. 1.80 - 2.10
Benzyl isoeugenol, cns. .....lb. 2.85 - —
Benzyl propionate, bots. .....lb. 1.35 - 1.65
Benzyl salicylate, bots. .....lb. 1.60 - 1.85
Benzylidine acetone, bots.....lb. 1.75 - 1.80
Benzylidine chloride, (see Benzal chloride).
Berberine bisulfate, cns. .....lb.35.00 -36.25
Berberine hydrochloride, bots....lb.35.00 -36.25
Bergamot oil, nat., NF, Italian, cns. lb.10.25 -10.50
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid).
Betaoxynaphthoic acid (see b-Oxynaphthoic acid).
Betaine, anhyd., 10,000-lb. lots, frt. alld lb. 3.00 - —
Betaine hydrochloride, 5,000-lb. lots, frt. alld lb. 1.60 - —
Betaine monohydrate, 10,000-lb. lots, frt. alld lb. 2.60 - —
Betagammapicoline (see b,g-Picoline).
Betamethylnaphthalene (see b-Methylnaphthalene).
Betanaphthol (see b-Naphthol).
Betanaphthylamine (see b-Naphthylamine).
Betaphenylethylamine (see b-Phenylethylamine).
BHC (see Benzene hexachloride, tech.).
Biotin, cryst., bots.....gram.10.00 - —
Biphenyl (see Diphenyl).
Birchtar oil, crude, cns.....lb. 1.50 - 1.90
Rectified, cns. .....lb. 1.75 - —
Bismuth chloride, jars.....lb. 5.11 - —
Bismuth hydroxide dms.....lb. 4.65 - —
Bismuth metal, bxs., ton lots....lb. 2.25 - —
Bismuth nitrate, cryst., dms.....lb. 2.10 - 2.17
Bismuth oxide, anhyd., dms.....lb. 4.47 - 5.05
Bismuth oxychloride, dms. .....lb. 4.37 - 4.42
Bismuth subcarbonate, USP, dms..lb. 3.20 - —
Bismuth subgallate, NF, fib. dms..lb. 3.15 - —
Bismuth subiodide, fib. dms.....lb. 5.37 - —
Bismuth subnitrate, NF, dms.....lb. 2.65 - —
Bismuth subsalicylate, USP, dms lb. 2.50 - —
Bismuth-ammonium citrate, USP, powd., jars lb. 4.22 - —
Bisphenol-A, bgs., c.l., t.l., frt. alld. lb. .29¾- —
bgs., l.c.l., same basis .....lb. .30¾- —
Blackberry root bark, bls.....lb. .45 - —
Black haw root bark, bls.....lb. .63 - .65
Black haw tree bark, bls.....lb. .45 - .50

Black Pigments

Black pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Black, acetylene, may be found in the A's under Acetylene black.

Blanc fixe, direct process, bgs., c.l., works..ton.110.00 - —
bgs., l.c.l., works .....ton.120.00 - —
bgs., l.c.l., New York whse..ton.155.00 - —
Blood, dried, 16-16½% ammonia, unit-ton. 5.25 - —
high-grade, unground, 16-17% ammonia, bgs., Chicago. unit-ton. 6.00 - —
Soluble, bgs., c.l..... lb. .13 - .14
bgs., t.l ..... lb. .15 - .17
bgs., l.t.l..... lb. .15½- .35½
Bloodroot, bls.....lb. .48 - .50

Blue Pigments

Blue pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue.

Blue dyes (see Dyes)
Blue vitriol (see Copper sulfate).
Bois de rose oil, Brazil, dms .... lb. 3.50 - —
Mexican (ree Lignaloe wood oil).
BON acid maroons, pure, bbls lb. 1.75 - —
Resinated, bbls.....lb. 1.50 - —
Bone black, dms., l.c.l., frt. alld..lb. .17 - .23¼
Pacific coast bone black prices 2c. per lb. higher.

Allyl Chloride $CH_2=CH-CH_2Cl$
Allyl Alcohol $CH_2=CH-CH_2OH$

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V 171 12 MAR 1957 XUM

Bonemeal—Calcium Arsonate

Bonemeal, steamed, works, E. . .ton.60.00 • —
Bone oil, dms., works.....lb. .65 • .70

Bone phosphate, defluorinated of lime (see Defluorinated phosphate).

Bone phosphate, precip. (see Calcium phosphate, tribasic).

Borax, tech., anhyd., 99%, bgs., c.l., works ton.83.00 • —
bgs., ton lots, ex whse. New York or Chicago ton.137.25 • —
bgs., smaller lots, same basis ton.142.25 • —
bulk, c.l., works.....ton.74.00 • —
cryst., 99½%, bgs., c.l., works. ton.71.00 • —
bgs., ton lots, ex whse. New York or Chicago.....ton.125.25 • —
bgs., smaller lots, same basis..ton.130.25 • —
gran., decahydrate, 99½%, bgs., c.l., works ton.45.00 • —
bgs., ton lots, ex whse. New York or Chicago ....ton.99.25 • —
bgs., smaller lots, same basis..ton.104.25 • —
bulk, c.l., works.....ton.38.50 • —
pentahydrate, 99%, bgs., c.l. works..ton.60.00 • —
bgs., ton lots, ex whse. New York or Chicago ....ton.114.25 • —
bgs., smaller lots, same basis..ton.119.25 • —
bulk, c.l., works.....ton.53.50 • —

Borax, tech., powd., bgs., c.l., works. ton.50.00 • —
bgs., ton lots ex whse. New York or Chicago.....ton.104.25 • —
smaller lots, same basis.. ton.109.25 • —

USP borax $15 per ton higher.

Bordeaux mixture, bgs., c.l., works, frt. alld. or nearest whse. pt lb. .18 • .24
bgs., l.c.l., same basis..... lb. .19 • .26
Boric acid, tech., 99.9% cryst., bgs., c.l., works..ton.129.00 • —
bgs., ton lots, ex whse. New York or Chicago.....ton.184.25 • —
bgs., smaller lots, same basis. ton.189.25 • —
dms., c.l., works.....ton.153.50 -173.50
dms., ton lots, ex whse. New York or Chicago.....ton.208.75 -228.75
dms., smaller lots, same basis. ton.213.75 -233.75
99.9% gran., bgs., c.l., works.ton.104.00 • —
bgs., ton lots, ex whse. New York or Chicago.....ton.159.25 • —
bgs., smaller lots, same basis. ton.164.25 • —
dms., c.l., works.....ton.128.50 -148.50
bgs., ton lots, ex whse. New York or Chicago.....ton.183.75 -203.75
dms., smaller lots, same basis. ton.188.75 -208.75
bulk, c.l., works.....ton.98.00 • —

Boric acid, tech., 99.9% powd., bgs., c.l., works..ton.109.00 • —
bgs., ton lots, ex whse. New York or Chicago.....ton.159.25 • —
bgs., smaller lots, same basis. ton.164.25 • —
dms., c.l., works.....ton.133.50 -153.50
bgs., ton lots, ex whse., New York or Chicago.....ton.188.75 -208.75
bgs., smaller lots, same basis. ton.193.75 -213.75

USP boric acid $25 per ton higher.

Borneol, cns.....lb. 2.50 • 4.50
Boron trifluoride gas, cyls, truckload, works..lb. .62 • —
cyls., l.t.l., works.....lb. .70 • —
Brazilwood extract (see Hypernic extract).
Brimstone (see Sulfur).
Broenner's acid, bbls.....lb. 1.76 • —
Bromine, purif., cs., c.l., t.l., dlvd. E. of Rockies..lb. .33 • —
cs., l.c.l., same basis.....lb. .35 • .40
ret. dms., c.l., t.l., dlvd. E. of Rockies..lb. .32 • —
ret. dms., l.c.l., same basis..lb. .32 • .34
tanks, same basis.....lb. .23½ • —
Bromochloromethane, dms., c.l., frt. equald..lb. .48 • —
dms., l.c.l., same basis.....lb. .50 • —
tanks, same basis.....lb. .47 • —
Bromoform, pharmaceutical grade, 100-lb. cbys..lb. 1.80 • 1.90
Bromstyrol, bots.....lb. 5.40 • 5.70
Brucine, cns., 100-oz. lots.....oz. .15 • .20
Brucine sulfate, NF, cns., 100-oz. lots..oz. .12 • .18
Buchu leaves, bls.....lb. 1.30 • —

Brown Pigments

Brown pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Brown, iron oxide, may be found in the I's under Iron oxide brown.

Butadiene, refd., cyls., c.l., refy..lb. .21 • —
cyls., l.c.l., refy.....lb. .22 • —
tanks, refy.....lb. .15 • —
Butane, indust., tanks, group 3..gal. .05 • —
n-Butyl acetate, ferment, dms., c.l., frt. alld..lb. .16½ • —
dms., l.c.l., same basis.....lb. .17½ • —
tanks, same basis.....lb. .14 • —
Syn., dms., c.l., dlvd. E.....lb. .16½ • —
dms., l.c.l., same basis.....lb. .17½ • —
tanks, same basis.....lb. .14 • —
sec-Butyl acetate, syn., dms., c.l., dlvd. E..lb. .13½ • —
dms., l.c.l., same basis .....lb. .14¼ • —
tanks, same basis.....lb. .11¾ • —
Butyl alcohol, ferment, dms., c.l., frt. alld..lb. .16½ • —
dms., l.c.l., frt. alld.....lb. .17½ • —
tanks, frt. alld.....lb. .14 • —
Syn., dms., c.l., dlvd.....lb. .16½ • —
dms., l.c.l., dlvd.....lb. .17½ • —
tanks, dlvd.....lb. .14 • —
sec-Synthetic, dms., c.l., dlvd..lb. .14½ • —
dms., l.c.l., dlvd.....lb. .15½ • —
tanks, dlvd.....lb. .12 • —
tert-Synthetic, dms., c.l., frt. alld. lb. .14 • —
dms., l.c.l., frt. alld.....lb. .15 • —
tanks, frt. alld.....lb. .12 • —
Butyl aldehyde (see Butyraldehyde).
Butyl chloride, dms., c.l., works..lb. .37½ • —
dms., l.c.l., works.....lb. .38¼ • —
Butyl ether, dms., c.l., works....lb. .33 • —
dms., l.c.l., works.....lb. .33¾ • —
tanks, works.....lb. .31 • —
Butyl lactate, dms., c.l., frt. alld. E. of Rockies..lb. .42½ • —
dms., l.c.l., same basis.....lb. .43½ • —
tanks, same basis.....lb. .40 • —
Butyl laurate, dms., works.....lb. .37½ • —
Butyl methacrylate, dms., c.l., t.l., works..lb. .55 • —
dms., l.c.l., works.....lb. .55½ • —
Butyl oleate, refd., dms., l.c.l., works..lb. .32 • —
Butyl phenylacetate, dms.....lb. 4.50 • 4.60
Butyl phthalate (see Dibutyl phthalate).
Butyl stearate, dms., c.l., frt. alld. E. of Mississippi.....lb. .26 • —
dms., l.c.l., same basis.....lb. .26½ • —
Butylamine (see Mono-, Di- and Tributylamine).
6-tert-Butyl-m-cresol, dms., c.l., works..lb. .55 • —
dms., l.c.l., works.....lb. .56 • —
tanks, works.....lb. .54 • —
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol).
p-tert-Butylphenol, bgs., c.l., works. lb. .27½ • —
bgs., l.c.l., works.....lb. .28½ • —
Butyraldehyde, dms., c.l., dlvd..lb. .22 • —
dms., l.c.l., dlvd. .....lb. .23 • —
tanks, dlvd. .....lb. .19½ • —
Butyric acid, 99%, dms., c.l., frt. equald..lb. .34 • —
dms., l.c.l., same basis.....lb. .34½ • —
tanks, same basis.....lb. .32½ • —
Butyric ether (see Ethyl butyrate).

C

Cacao butter (see Cocoa butter).
Cadmium CP red, dark shade, bbls., frt. alld. E. of Rockies..lb. 6.60 • —
Light shade, bbls., same basis..lb. 6.20 • —
Medium shade, bbls., same basis. lb. 5.50 • —
Medium light shade, bbls., same basis lb. 5.10 • —
Orange-red shade, bbls., same basis..lb. 4.40 • —
Cadmium CP yellow, all shades, bbls., frt. alld. E. of Rockies. lb. 2.85 • —
Cadmium iodide, 25-lb. fib. dms..lb. 6.75 • 7.00
Cadmium metal, ingots or sticks, cs., dlvd..lb. 1.70 • —
Cadmium-mercury lithopone orange, deep shade, bbls..lb. 1.78 • —
Cadmium-mercury lithopone red, dark shade, bbls., same basis..lb. 2.40 • —
Light shade, bbls., same basis..lb. 1.95 • —
Medium shade, bbls., same basis. lb. 2.25 • —
Medium light shade, bbls., same basis..lb. 2.10 • —
Cadmium-selenide lithopone orange, deep shade, bbls., frt. alld. E. of Rockies..lb. 2.00 • —
Light shade, bbls., same basis..lb. 1.80 • —
Cadmium-selenide lithopone red, dark shade, bbls., frt. alld. E. of Rockies..lb. 3.46 • —
Light shade, bbls., same basis..lb. 2.14 • —
Maroon shade, bbls., same basis. lb. 3.35 • —
Medium shade, bbls., same basis. lb. 2.67 • —
Medium-light shade, bbls., same basis..lb. 2.34 • —
Orange shade, bbls., same basis. lb. 1.70 • —
Orange-red shade, bbls., same basis..lb. 1.80 • —
Cadmium-selenide lithopone yellow, all shades, bbls., frt. alld. E. of Rockies..lb. 1.15 • —
Caffeine, NF, citrated, dms., 100-lb. lots or more..lb. 2.70 • —
USP, nat., cryst., anhyd., dms., 100-lb. lots or more..lb. 3.00 • —
cryst., hydrous, dms., 100-lb. lots or more..lb. 2.80 • —
USP, syn., cryst., anhyd., dms., 100-lb. lots or more..lb. 3.00 • —
cryst., hydrous, dms., 100-lb. lots or more..lb. 2.80 • —
Cajeput, oil, native, cns. .....lb. 1.75 • 3.30
Redist., USP, cns. .....lb. 2.25 • 3.40
Calamine, USP, dms. .....lb. .34 • —
Calamus oil, bots. .....lb.12.00 -20.00
Calciferol, cryst., vials, 1-kilo lots, works..gram. .60 • —
Vials, 25 to 100 gram lots, works..gram. .65 • —
Calciferol, in edible oil (see Viosterol).
Calcium p-aminosalicylate, fib. dms., 100 lbs. or more, frt. adjusted..lb. 4.00 • —
Calcium arsenate, dealers, bgs., c.l., frt. alld..lb. .09 • .09½

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- Lower oxidation potential than those of chlorine or fluorine.
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- Catalytic properties of various inorganic bromides in reactions involving intramolecular rearrangements.

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- Bromine can be compounded to produce active germicides, bactericides, and algicides.

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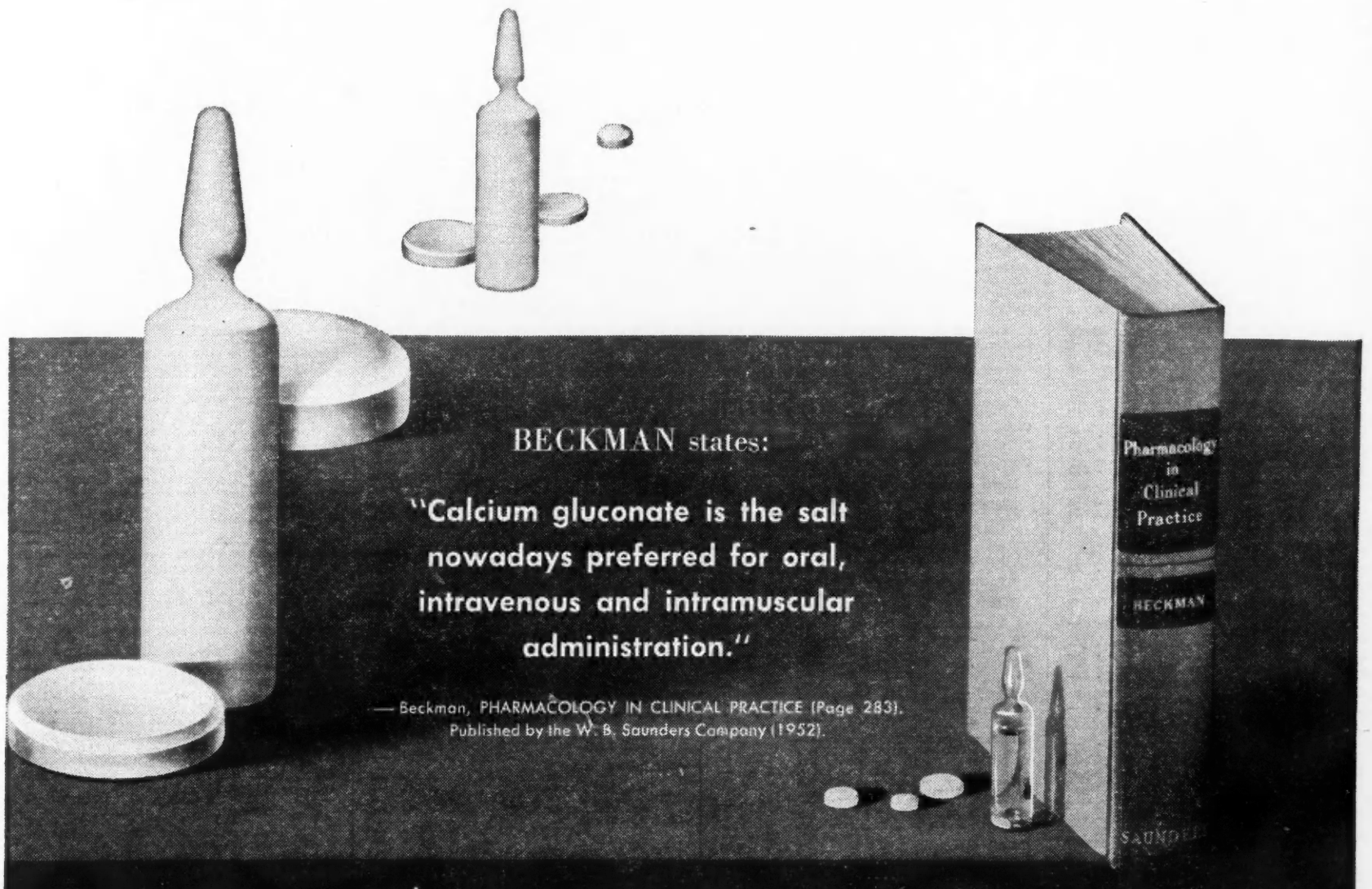
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IODIDES
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Mallinckrodt Chemical Works

SECOND & MALLINCKRODT STREETS, ST. LOUIS 7, MO. • 72 GOLD STREET, NEW YORK 8, N. Y.

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IN CANADA: MALLINCKRODT CHEMICAL WORKS LIMITED • MONTREAL • TORONTO

Calcium bromide, NF, 100 lbs. or more lb. .97 - —
Calcium carbide, standard generator size, dms., c.l., dlvd ton.134.40 - —
Calcium carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l., works ton.10.50 - —
chalk, whiting, 325 mesh, bgs., c.l., works ton.32.00 -34.00
bgs., l.c.l., same basis lb. .10 - .10½
water-grd., ½ to 10 microns, bgs., c.l., works ton.30.00 - —
10 to 20 microns, bgs., c.l., works ton.17.00 -18.00
Precip., dense, bgs., c.l., works. ton.32.50 - —
bgs., l.c.l., works ton.42.50 - —
medium, bgs., c.l., works ton.28.00 - —
bgs., l.c.l., works ton.48.00 - —
surface treated bgs., c.l., works. ton.37.50 - —
bgs., l.c.l., works ton.47.50 - —
ultrafine, bgs., c.l., works ton.110.00 -160.00
bgs., l.c.l., works ton.120.00 -175.00
Calcium chloride, flake, 77-80%, paper bgs., c.l., works, frt. equald ton.31.00 - —
Gran., purif., dms. lb. .27 - —
Liquor, 40%, tanks, frt. equald. ton.12.50 - —
Pellets, bgs., c.l., works ton.37.80 - —
Powd., bgs., c.l., works ton.37.00 - —
Solid, 73-75%, dms., c.l., frt. equald ton.29.50 - —
dms., l.c.l., works, frt. equald. ton.36.00 -73.00
USP, gran., dms lb. .32 - —
Calcium chromate, bgs., frt. equald. lb. .29½- .30
Calcium cyanide, dms., c.l., dlvd. E. of Rockies lb. .20 - —
dms., l.c.l., same basis lb. .24 - .55
Calcium cyclamate, 100-lb. dms lb. 2.95 - —
Calcium gluconate, AA, bbls., dms. lb. .74 - .76
USP, bbls., dms lb. .67 - .69
Calcium hydride, lump, dms., works. lb. 2.20 - 3.00
Calcium hypochlorite, high test, 45-lb. cs., dlvd. E. of Rockies cs.22.95 -25.10
100-lb. dms., same basis dm.20.80 -34.50
Calcium hypophosphite, dms., 1,000-lb. lots lb. 1.28 - —
Calcium iodide, jars lb. 4.52 - —
Calcium lactate, NF, dms., 10,000-lb. lots or more, works lb. .36 - .40
Calcium mandelate, USP, dms., works lb. 2.10 - 2.25
smaller lots, works lb. .41 - .48
Calcium naphthenate, liq., 4% Ca., dms., frt. equald lb. .27¼- —
Calcium nitrate, fertilizer, grade, bgs., c.l., Los Angeles ton.46.00 - —
Tech., 5-dm. lots, works lb. .13 - —
Calcium pantothenate, dms., bots., frt. adjusted gram. .045 - —
Calcium para-aminosalicylate (see Calcium p-aminosalicylate).
Calcium phenolsulfonate, dms lb. .74 - —
Calcium phosphate, dibasic, USP, bgs., c.l., frt. equald 100 lbs. 7.75 - —
bgs., l.c.l., frt. equald.100 lbs. 8.50 - —
Feed grade, 18½% P, bgs., c.l., t.l., frt. equald ton.79.55 -83.25
bgs., l.c.l., frt. equald ton.89.55 -93.25
21% P, bgs., c.l., t.l., frt. equald ton.94.50 - —
bgs., l.c.l., frt. equald ton.99.50 -104.50
Monobasic, bgs., 10,000-lb. lots, frt. equald 100 lbs. 7.20 - —
bgs., smaller lots, same basis, 100 lbs. 7.70 - —
Tribasic, NF, precip., bgs., c.l., works, frt. equald 100 lbs. 9.25 - —
bgs., l.c.l., frt. equald 100 lbs.10.50 - —
Calcium phytate, bgs., works lb. .50 - —
Calcium resinate, precip., dms., frt. alld., works lb. .30½- —
Calcium silicate, hydrated, bgs., c.l., works lb. .06 - —
bgs., l.c.l., works lb. .06½- —
Calcium silicate, paint grade (see Wollastonite).
Calcium stearate, ctns., c.l. lb. .39 - —
ctns., l.c.l. lb. .40 - .44
Calcium sulfate (see Gypsum).
Calomel, USP, powd., dms lb. 5.42 - —
Camphene, 46° m.p., dms. incl., c.l., works lb. .15 - —
dms. incl., l.c.l., same basis lb. .16½- —
tanks, same basis lb. .12½- —
Camphene, chlorinated, 67-69% (see Toxaphene).
Camphor, monobromated, NF, dms., kgs lb. 3.50 - —
Nat., USP, powd., cs., 100-lb. lots, lb. .60 - .65
tablets, 1-oz., ½-oz. cs lb. .85 - .90
Syn., tech., 1 bbl. or more lb. .48 - —
Syn., USP, gran., powd., bbls., 2,000-lb. lots lb. .59 - —
bbls., 1,000-lb. lots lb. .60 - —
bbls., smaller lots lb. .61 - —
tablets, tins, 2,000-lb. lots lb. .90 - —
ins, 1,000-lb. lots lb. .91 - —
tins, smaller lots lb. .92 - —
Camphor oil, sassafrassy, dms lb. .28 - .35
White, dms lb. .29 - —
Canada balsam (see Fir balsam).
Cananga oil, native, cns lb. 7.75 - —
Rectified, cns. lb. 9.75 - —
Candelilla wax, crude, bgs lb. .65 - .69
Refd., bgs. lb. .71 - .75
Powdered Candelilla wax, 20 to 100 mesh, 7c. higher.
Cantharides, Chinese, cs lb. 2.00 - 2.05
powd., bxs. lb. 2.25 - 2.30
Russian, bgs lb. 4.00 - 4.05
powd., bxs. lb. 4.35 - 4.40
Capric acid, dms lb. .25 - .27
Capryl alcohol, 85%, dms., c.l., and t.l., works lb. .19 - —
dms., l.t.l., same basis lb. .19½- —
tanks, frt. equald lb. .16½- —
Sec., 92-99%, dms., c.l. lb. .22 - —
dms., l.c.l. lb. .23 - —
tanks lb. .19½- —
Caprylic acid, dms lb. .25 - .27
Capsicum (see Pepper, red).
Capsicum oil (see Capsicum oleoresin).
Capsicum oleo resin, NF, from dom. pepper, dms lb. 4.50 - 5.25
NF, from African pepper, dms lb. 4.35 - 5.00
Caraway seed, Dutch, bgs lb. .17 - —
Caraway oil, NF, cns lb. 3.65 - 4.00
Carbazole, 97%, bbls., ton lots, works lb. 1.05 - —
Carbon black, channel, rubber beads, bulk, c.l., works lb. .07 - —
bgs., c.l., works lb. .074 - —
bgs., l.c.l., works lb. .1225- —
Furnace, fast extruding, bgs., c.l., works lb. .06 - —
ctns., l.c.l., whse lb. .10 - —
high abrasion, bulk, c.l., works. lb. .0750- —
bgs., c.l., works lb. .0790- —
bgs., l.c.l., dlvd or whse lb. .122 - .125
high modulus, bgs., c.l., works. lb. .0550- —
ctns., l.c.l., whse lb. .0950- —
Carbon black, furnace, semi-reinforcing, bgs., c.l., works.lb. .0450- —
bgs., ctns., l.c.l., whse lb. .0850- —
Pigment, high color beads, ctns., c.l., works lb. .72 - —
ctns., l.c.l., dlvd or whse. lb. .78 - —
medium color uncompressed, bgs., c.l., works lb. .12 - —
bgs., l.c.l., dlvd. or whse lb. .19 - —
Carbon dioxide, indust., wholesale, bulk, dlvd. Metropolitan area ton.73.00 -115.00
cyls., same basis lb. .08 - .09
Solid, wholesale, same basis lb. .035 - .040
Carbon disulfide, 55-gal. dms., c.l., works, frt. equald. to competitive points lb. .07 - —
55-gal. dms., l.c.l., same basis lb. .08½- .09
5-gal. dms., 30 dms. to c.l., same basis lb. .13 - —
5-gal. dms., less than 30 dms., same basis lb. .16 - —
tanks, dlvd. lb. .0515- —
Carbon tetrachloride, CP, consumers, dms., l.c.l., frt. alld lb. .12¼- .14½
Tech., consumers, dms., c.l., frt. alld lb. .11¼- —
dms., l.c.l., frt. alld lb. .13½- —
tanks, frt. alld lb. .10 - —
Carboxymethyl cellulose (see CMC).
Carbromal, NF, dms., 100-lb lots, works lb. 4.00 - 4.25
dms., smaller lots, works lb. 4.10 - 4.75
Cardamom oil, NF, bots lb.38.00 -40.50
Cardamom seed, bleached, "A" lb. 3.20 - —
Bleached, "B" lb. 3.10 - —
Decorticated, Ceylon, cs lb. 3.00 - —
Guatemalan, cs lb. 3.00 - —
Green, Alleppey, bgs lb. 2.15 - —
Ceylon, bgs. lb. 2.15 - —
Carmine No. 40, NF, bulk, 100-lb. lots or more, dlvd lb.16.80 - —
bulk, smaller lots, dlvd lb.16.90 -17.30
Carnauba wax, chalky, bgs., ton lots lb. .65 Nom.
North country No. 2, crude, bgs., ton lots lb. .70 Nom.
North country, No. 3, Ceara, crude, bgs., ton lots lb. .65 - .67
Ceara, refd., pure, bgs., ton lots lb. .75 - .76
Ceara, tech., bgs., ton lots lb. .67 - .69
Parnahyba, crude, bgs., ton lots. lb. .66 - .67
Parnahyba, refd., pure, bgs., ton lots lb. .75 - .76
Yellow No. 1, Ceara, bgs., ton lots lb. 1.33 - 1.34
Parnahyba, bgs., ton lots lb. 1.35 - 1.36
Powdered carnauba wax, 20 to 100 mesh, 7c. higher.
Carotene, tech, 1,350,000 A units per gram, tins, 5-10 kilo lots, dlvd gram. .295 - —
Tech., in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works million units. .12 - —
USP, microcrystalline in oil, 400,000 A units per gram., dms., dlvd. million units. .21 - —
b-Carotene, in vegetable oil, 400,000 A units per gram, cns. gram. .084 - —
Pure, cryst., 1,600,000 to 1,670,000 A units per gram, cns. gram. .35 - —
Carvol, bots lb. 4.50 - 8.00
Cascara sagrada bark, bulk lb. .36 - —
Casein, dom., acid precip., standard, bgs., 10,000-lb. lots or more, shipt. point lb. No prices.
Acid precip., premium, bgs., 10,000-lb. lots or more, shipt. point lb. No prices.
Imp., acid-precip., grd., Argentine, bgs., c.l., duty paid lb. .22½- —
New Zealand, duty paid lb. .25 - .26
Cashewnut shell liquid, treated, dms., c.l., Newark, N. J lb. .22 - —
dms., ton lots, same basis lb. .23 - —
dms., dm. lots, same basis lb. .25 - —
Cassella acid, dms., frt. alld., 100% basis lb. 1.44 - 1.75
Cassia, Batavia, "A," bls. lb. .22 - —
"B" lb. .21 - —
"C" lb. .20 - —
Corinje, "A" lb. .20½- —
"B" lb. .19½- —
"C" lb. .18 - —
Cassia oil (see Cinnamon leaf oil, USP).
Castor beans, bgs., f.o.b. Brazil. ton.180.00 Nom.
Castor oil, dom., blown, dms., c.l., lb. .2850- —
dms., l.c.l. lb. .2950- —
dehydrated, bodied, dms., c.l., lb. .3010- —
dms., l.c.l. lb. .3110- —
tanks lb. .2810- —
unbodied, dms., c.l. lb. .2860- —
dms., l.c.l. lb. .2960- —
tanks lb. .2650- —
hydrogenated, bgs., ton lots lb. .3375- —
bgs., l.c.l., dlvd. lb. .3575- —
No. 1, dms., c.l. lb. .2500- —
dms., l.c.l. lb. .2600- —
tanks lb. .2300- —
No. 3, tech., dms., c.l. lb. .2350- —
dms., l.c.l. lb. .2450- —
tanks lb. .2150- —
Refd. and deodorized, dms., c.l. lb. .2950- —
dms., l.c.l. lb. .3050- —
USP, dms., c.l. lb. .2650- —
dms., l.c.l. lb. .2750- —
tanks lb. .2450- —
Imp., No. 1, Brazilian, tanks lb. .20¾- .21
Castor oil, sulfonated, 50%, dms., works lb. .15¼- .15½
75%, dms., works lb. .20 - .20½
Castor oil acids, dms. lb. .17¾- .19¾
Castor oil pomace, bgs., c.l., works. ton.45.50 - —
Castoreum, nat., cns. lb. 5.25 -30.00
Syn., cns. lb. 9.00 - —
Catechol, CP, cryst., fib. dms., works lb. 2.17½- —
Resub., dms., works lb. 4.29½- —
Catnip leaves, Southern, bls. lb. .75 - —
Cedarleaf oil, USP, XIII, cns., dms. ton.3.75 - 4.25
Cedarwood oil, cns., dms. lb. .65 - 1.00
Celery seed, French, bgs lb. .41 - —
Indian, bgs. lb. .21 - —
Celery seed, oil, bots lb.15.00 - —
Cellulose acetate, flake, powd., ctns., bgs., 100-lb. lots or more, dlvd. E lb. .35 - .45
Cellulose acetate-butyrate, powd., 17% butyryl content, bgs., dlvd. E lb. .545 - .555
27% butyryl content, bgs., dlvd. E lb. .595 - .605
38% butyryl content, bgs., dlvd. E lb. .545 - .555
50% butyryl content, bgs., dlvd. E lb. .585 - .595
50% butyryl alcohol, half-second, bgs., dlvd. E lb. .545 - .555
Cellulose gum, pure, high vis., bgs., 23,000-lb. lots or more, works, frt. alld lb. .55 - —
bgs., smaller lots, same basis. lb. .57 - —
Cellulose gum (see Pyroxylin scrap).
Cerium chloride, 48% dms., dlvd lb. .30 - —
Cerium hydrate, 74% CeO_2 fib. dms., 100-lb. lots or more lb. 1.44 - —
77% CeO_2, fib. dms., 100-lb. lots or more lb. 1.74 - —
Cerium oxalate, NF, 48%, bgs., works lb. 1.32 - —
Cerium oxide, optical grade, bgs., 50-lb. lots or more, dlvd lb. 1.85 - 1.98
bgs., smaller lots, dlvd lb. 2.03 - 2.23
Cetyl alcohol, extra fib. cns., 500-lb. lots or more lb. .65 - .72
NF, fib cns., 140-lb. lots or more lb. .48 - —
Chalk (see Calcium carbonate).
Chamomile flowers, Hungarian style, cs lb. .85 - .95
Roman, cs. lb. 3.00 - —
Chamomile oil, blue, Hungarian, bots lb.225.00 - —
Charcoal, activated, NF, fib. dms., c.l., works lb. .25 - .32
fib. dms., 5-ton lots, works lb. .26½- .32½
fib. dms., smaller lots works lb. .27 - .50
Charcoal, black (see Charcoal, activated).
Charcoal, bone (see Bone black).
Charcoal, hardwood, bulk, lump, c.l., f.o.b. plant ton.55.00 - —
briquets, c.l., f.o.b. plant ton.80.00 - —
5-lb. paper bgs., c.l., same basis ton.108.00 - —
10-lb. paper bgs., c.l., same basis ton.98.00 - —
25 lb. paper bgs., c.l., same basis ton.88.00 - —
40 lb. paper bgs., c.l., same basis ton.85.00 - —
Pinewood, gran., bgs., c.l., works, south ton.57.00 - —
bgs., l.c.l., works, south ton.57.00 -67.00
lump, bgs., c.l., works, south. ton.53.50 - —
bgs., l.c.l., works, south ton.56.50 -71.00
bulk, c.l., works, south ton.38.00 - —
bulk, t.l., works, south ton.41.00 - —
Chenopodium oil, NF, cns. lb. 4.50 - 4.75
Chestnut extract, imp., solid, 60% tannin, bgs., ex dock, plus duty lb. .08½- —
powd., 70% tannin, bgs., ex dock, plus duty lb. .0959- —
Chicago acid, paste, bbls., frt. alld. lb. 3.21 - —
Chinawood oil (see Tung oil).
Chloral, tech., 94% min. dms., c.l., works lb. .23 - —
dms., l.c.l., works lb. .24 - —
tanks, multiple units, 5 cars, works lb. .21 - —
Chloral hydrate, USP, jars, 1,000-lb. lots lb. .83 - —
jars, 500-lb. lots. lb. .88 - —
jars, 100-lb. lots or less lb. .93 - —
Chloramine T, NF, bbls., works lb. .75 - 1.00
Chlordan, agricultural, dms., c.l., frt. alld lb. .65 - —
dms., l.c.l., 5,000 to 10,000-lb. lots, frt. alld lb. .66 - —
Clarif., dms., c.l., frt. alld lb. .69 - —
dms., l.c.l., 5,000 to 10,000-lb. lots, frt. alld lb. .70 - —
Chlorinated paraffin, 42%, dms., c.l., frt. alld lb. .16¼- —
dms., l.c.l., same basis lb. .17¼- —
70%, dms., c.l., same basis lb. .18¾- —
dms., l.c.l., same basis lb. .19¾- —
Chlorinated rubber, 5, 10, 20 cps., ctns., c.l., works lb. .60 - —
ctns., l.c.l., works lb. .61 - —
125, 1,000 cps., ctns., c.l., works. lb. .70 - —
ctns., l.c.l., works lb. .71 - —
Chlorine, liq., cyls., c.l., works, frt. equald lb. .10¼- —
cyls., l.c.l., Metropolitan area lb. .11¾- .13
tanks, single units, works, frt. equald 100 lbs. 3.15 - —
tanks, multiple units, 5 cars, works, frt. equald 100 lbs. 4.05 - —
tanks, multiple units, 3 cars, same basis 100 lbs. 4.25 - —
tanks, multiple units, 2 cars, same basis 100 lbs. 5.25 - —
tanks, multiple units, 1 car, same basis 100 lbs. 7.25 - —
Chloroacetic acid, mono, flake, 99%, dms., c.l lb. .23½- .25½
dms., l.c.l. lb. .24½- —
tech., flake, 96-97%, dms., c.l., frt. equald lb. .19 - —
dms., l.c.l., frt. equald lb. .20 - —
4-Chloro-2-aminotoluene, fused, bbls. lb. 1.45 - —
m-Chloroaniline, dms., min. 10,000 lbs., or over, frt. alld lb. .75 - —
dms., less than 10,000 lbs., same basis lb. .80 - —
tanks, same basis lb. .73 - —
o-Chloroaniline, dms., c.l., frt. alld. lb. .65 - —
dms., l.c.l., same basis lb. .67 - —
tanks, same basis lb. .63 - —
p-Chloroaniline, dms., c.l., frt. alld. lb. .77 - —
dms., l.c.l., same basis lb. .79 - —
o-Chlorobenzaldehyde, dms., t.l., works, dlvd. to N.Y. metropolitan area lb. 1.05 - —
dms., l.t.l., same basis lb. 1.20 - —
dms., 500 to 1,500 lbs., same basis. lb. 2.00 - —
o-Chlorobenzaldehyde, dms., 2,000 lbs. or more, works, dlvd. to N. Y. metropolitan area lb. 1.95 - —
o-Chlorobenzoic acid, fib. dms., t.l., works lb. 1.10 - —
fib. dms., smaller lots, works lb. 1.25 - —
p-Chlorobenzoic acid, fib. dms., 2,000-lbs. or more, works. lb. 2.25 - —
fib. dms., less than 2,000-lbs., same basis lb. 2.30 - —
Chloroform, tech., dms., c.l., dlvd. E lb. .18 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .17 - —
USP, dms. lb. .30 - —
2-Chloro-4-nitroaniline, paste, dlvd. E., 100% basis lb. .81 - —
Powd., dlvd. E., 100% basis lb. .86 - —
4-Chloro-2-nitroaniline, powd., dlvd. E lb. .80 - —
o-Chlorophenol, dms., c.l., frt. equald lb. .37 - —
dms., l.c.l., same basis lb. .38 - —
p-Chlorophenol, dms., c.l., frt. equald lb. .37 - —
dms., l.c.l., same basis lb. .38 - —
Chloropicrin, coml., bots. lb. 1.50 - —
Coml., cyls., 180 lbs., frt. alld lb. .95 - —
cyls., 100 lbs., same basis lb. .97 - —
cyls., 25 lbs., same basis lb. 1.22 - —
Chlorosulfonic acid, dms., c.l., frt. equald lb. .0465- —
dms., l.c.l., frt. equald lb. .0515- —
tanks, frt. equald lb. .0415- —
Chlorosulfonic acid, in stainless steel dms. ½c. per lb. higher.
Choline bitartrate, fib. dms., frt. adjusted lb. 1.25 - 1.35
Choline chloride, fib. dms., frt. adjusted lb. 1.25 - 1.35
Choline dihydrogen citrate, fib. dms., frt. adjusted lb. 1.25 - 1.35
Chrome green, CP, dark, light, medium, blue content 1 to 15%, bbls., N. of Tenn. and N. C., E. of Miss., including St. Paul, Minn., Davenport, Rock Island, St. Louis lb. .40 - .42
blue content 16-30%, bbls., same basis lb. .40 - .42
blue content 31-45%, bbls., same basis lb. .41 - .43
blue content 45-49%, bbls., same basis lb. .44 - .46
Reduced color, 25% lb. .19 - .20

Chrome green prices are ½c. higher, dlvd. at the following points, except as noted:—Ala., Fla., Ga., La. (Shreveport 1½c.), Miss., N. C., S. C., Tenn., Texas (Dallas, Ft. Worth, 1¼c.; El Paso, 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1c. higher dlvd. Pac. coast; for Denver, Pueblo, Salt Lake City, Wichita, prices are equalized with Chicago.

Chrome orange, CP, bbls., dlvd. N. of Tennessee and N. C., E. of Miss. R., include Davenport, Tenn., and E. of Minneapolis, Rock Island, St. Louis, St. Paul lb. .35 - —

Chrome orange prices are ½c. higher dlvd. Ala., Fla., Ga., La. (Shreveport 1½c.), Miss., N. C., S. C., Tenn., Dallas and Ft. Worth, Tex., El Paso, Tex., 2c. Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1.6c. higher dlvd. Pac. Coast for Denver, Pueblo, Salt Lake City, Wichita, prices are equalized with Chicago.

Chrome yellow, CP, bbls., dlvd. N. of Tenn., and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island lb. .35 - —

Chrome yellow price are ½c. higher dlvd. Ala., Fla., Ga., La., (Shreveport 1½c. higher); Miss., N. C., S. C., Tenn.; Dallas, Tex., 1¼c. higher; Ft. Worth, Tex. 1½c. higher; El Paso, Tex. 2c. higher; Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph 1.6c. higher; Dlvd. Pac. Coast, for Denver, Pueblo, Salt Lake City, Wichita prices are equalized with Chicago.

Chromic acid, 99¾% dms., c.l., works, frt. equald lb. .29½- —
dms., l.c.l., dlvd. New York Metropolitan area lb. .30 - .31
Chromic acid, NF (see Chromium trioxide).
Chromium acetate, soln., 7½%, bbls., works lb. .09½- —
cbys., works lb. .11¼- —
Chromium fluoride, bbls., works lb. .51 - .52
Chromium oxide, hydrated, bbls., fib dms., c.l., frt. alld lb. 1.20 - —
Pure, bgs., c.l., frt. alld lb. .44¾- —
bgs., l.c.l., same basis lb. .45½- —
Chromium trioxide, NF, bots lb. 1.15 - —
Cinchona bark, NF, red, broken, bgs. lb. .35 - .40
NF, yellow, broken, bgs lb. .35 - .40
Cinnamic acid, refd., bots lb. 2.50 - 3.50
Cinnamic alcohol, bots lb. 2.15 - 2.75
Cinnamic aldehyde, dms lb. .95 - 1.25
Cinnamon, Ceylon, No. 2, bgs lb. .98 - —
Ceylon, "0000," bgs., afloat lb. 1.08 - —
Cinnamon bark oil, bots lb.36.00 -70.00
Cinnamon leaf oil, crude, dms lb. 1.60 - 2.00
USP (Cassia), cns., dms lb.10.25 -10.90
Citral, bots., cns lb. 4.90 - 5.90
Citric acid, USP, anhyd., fine gran., bgs., dms., c.l lb. .29½- .30
bgs., dms., 10,000-lb. lots, 1 shipt lb. .30 - .30½
bgs., dms., smaller lots lb. .30½- .31
hydrous, fine gran., bgs., dms., c.l lb. .27½- .28
bgs., dms., 10,000-lb. lots, 1 shipt lb. .28 - .28½
bgs., dms., smaller lots lb. .29 - .29½
Powdered citric acid ½c. higher.
Citronella oil, Ceylon, cns., dms lb. .87 - .90
Java, cns. lb. 1.95 - —
Java-type, cns. lb. 1.20 - —
Citronellal, bots., dms lb. 2.85 - 3.50
Citronellol, bots., dms lb. 3.90 - —
Civet, artif., bots lb.13.75 -15.00
Nat., bots. oz. 8.50 -15.00
Clay, ball., dom., airfloated, bgs., c.l., Tenn ton.19.50 - —
crushed, shed moisture, bulk, c.l., Tenn ton.10.00 - —
purif., bgs., c.l., Tenn ton.20.50 - —
Imp., airfloated, bgs., c.l., Atl. port long-ton.42.00 -45.00
lump, bulk, Atl. port long-ton.27.00 -30.20
Clay, China, dom., dry-grd., airfloated, 99%, 325 mesh, bgs., c.l., Georgia, works. ton.10.00 - —
bgs., l.c.l., Georgia, works. ton.15.50 - —
99%, 300 mesh, bgs., c.l., Georgia, works ton.13.50 -14.50
bgs., l.c.l., same basis ton.35.00 -36.00
Imp., white, lump, bulk, c.l., ex dock, Philadelphia, Portland, Me gross ton.20.00 -35.00
powd., bgs., c.l., ex dock net ton.50.00 - —
bgs., l.c.l., ex whse net ton.60.00 -65.00
Cleve's acid, mixed, bbls lb. 1.05 - —
Clove, Madagascar, bgs lb. .42½- —
Zanzibar, bgs lb. .47 - —
Clove bud oil, USP, cns., dms lb. 2.65 - 2.85
Clove leaf oil, crude, dms lb. 1.20 - 1.50
CMC, crude, 96%, low or medium vis., bgs. or fib. dms., 23,000 lbs., dlvd. E., 100% basis lb. .39½- .41
bgs. or fib. dms., less than 23,000 lbs., dlvd. E., 100% basis lb. .41½- .43
65%, low or medium vis., bgs. or fib. dms., c.l., dlvd. E., 100% basis lb. .39½- .41
bgs. or fib. dms., dlvd. E., 100% basis lb. .41½- .43
CMC, purif., high vis. (see Cellulose gum).
CMC, standard, low or medium vis., bgs., 23,000 lbs, works, frt. alld lb. .55 - —
bgs., smaller lots, same basis. lb. .57 - —
CMC prices W. of the Rockies are 2c. per lb. lower and are on a works basis.
Coaltar, crude, resale for solns., dms., c.l., ex whse gal. .30½- —
dms., l.c.l., ex whse gal. .33½- —
tanks, works gal. .17 - —
Refd., resale, indust., dms., c.l., ex whse gal. .30½- .35
dms., l.c.l., ex whse gal. .33½- .39
tanks, works gal. .16½- .20½
Coaltar pitch, aluminum, bulk, works ton.40.00 -42.00
Carbon and indust., bulk, works. ton.40.00 - —
Core, bulk, works ton.36.50 - —
Fiber, bulk, works ton.44.00 - —
Roofing, 140-155°F., Fed. Spec. RP-381, Type I, tanks, works ton.39.00 - —
Cobalt acetate, 23.7% Co, dms., dlvd. lb. 1.10 - —

Cobalt blue, genuine, 250-lb. bbls., dlvd. N. of Tenn. and N. C., E. of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis lb. 4.90 - —

Cobalt blue dlvd. prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equald. with Chicago.

Cobalt blue imitation (see Ultramarine blue).

Cobalt carbonate, 48% Co, powd., bgs., dlvd lb. 1.57 - —

Cobalt chloride, 24.2% Co, dms., dlvd lb. 1.05 - —

Cobalt hydrate, 60-61% Co, dms., dlvd lb. 2.20 - —

Cobalt linoleate, fused 8½% Co, dms lb. .68 - —

Liq., 6% Co, dms lb. .54¾- —

Cobalt metal, 97-99%, kgs., ex whse. lb. 2.00 - —

Cobalt naphthenate, liq., 6% Co, dms., dlvd lb. .46½- —

Cobalt nitrate, 20.1% Co, bbls., dlvd. lb. .85 - —

Cobalt oxide, black, 72½-73½% Co, kgs lb. 1.52 - —

70-71% Co, kgs lb. 1.48 - —

Cobalt phosphate, powd., 32.1% Co, kgs., dlvd lb. 1.43 - —

Cobalt resinate, fused, 3% Co, dms. lb. .28 - —

Cobalt sulfate, cryst., 21% Co, dms., dlvd lb. .69 - —

Monohydrated, 33% Co, dms., dlvd lb. 1.17 - —

Cobalt tallate, 6% Co, dms., dlvd.lb. .42 - —

Cocaine, USP, cns., 100-oz. lots oz.17.80 - —

Cocaine hydrochloride, cns., 100-oz. lots oz.13.75 - —

Cocillana bark, bls lb. .25 - —

Cocoa butter, bgs. lb. .62 - .66

Coconut oil, crude, tanks, New York lb. .11¾- —

tanks, Pac. coast lb. .10⅞- —

Refd., Cochin type, dms., tax incl lb. .19¼- .19½

deodorized, dms., tax incl lb. .22¼- .23¼

Coconut oil acids, dist., dms. lb. .24½- .25½

tanks lb. .21½- —

Dbl. dist., dms. lb. .24½- .26½

tanks lb. .22½- —

Cod oil, Newfoundland, dms. lb. .11⅝- .11⅞

Codeine, NF, cns., 100-oz. lots oz.13.25 - —

Codeine hydrochloride, cns., 100-oz. lots oz.11.75 - —

Codeine phosphate, USP, cns., 100-oz. lots oz.10.25 - —

Codeine sulfate, USP, cns., 100-oz. lots oz.10.75 - —

Codliver oil, USP, dms. gal. 1.45 - 1.55

Cohosh root, black, bls. lb. .20 - .22

Blue, bls. lb. .20 - .22

Colchicine, USP, bots., cns. oz.29.00 -35.50

Colchicum root, bls. lb. .35 - —

Colchicum seed, bgs. lb. .60 - —

Flexible, dms. lb. .34 - —

Colocynth, pulp, bls. lb. .55 - —

Colombo root, bls. lb. .15 - .16

Collodion, USP, dms. lb. .32½- —

Condurango bark, bls lb. .26 - —

Copaiba balsam, cns., dms. lb. .60 - .95

Copaiba oil, cns. lb. 1.75 - 2.50

Copal Congo gum, No. 1, bgs. lb. .24 - .26

No. 2, bgs. lb. .18½- .20

No. 3, bgs. lb. .15¾- .17

Copper acetate, bbls., c.l., works. lb. .53 - —

bbls., l.c.l., works lb. .54 - —

Copper carbonate, 55%, bgs., c.l., works lb. .34 - —

bgs., l.c.l., works lb. .35½- —

Copper chloride, cupric, anhyd., dms., works lb. .43½- .44

Cryst., dihydrate, dms., works. lb. .29½- .30

Cryst., dried, dms., works lb. .37¾- .38¼

Copper chloride, cuprous, dms., works lb. .43 - .47

Copper cyanide, tech., bbls., 20,000-lb. lots or more lb. .74½- —

bbls., 1,000-lb. lots or more lb. .75½- —

bbls., smaller lots lb. .77½- —

Copper gluconate, dms lb. 3.15 - 3.35

Copper hydrate, dms., c.l., frt. alld. E. of Miss lb. .51½- —

dms., l.c.l., same basis lb. .52 - —

Copper metal, electrolytic, dlvd. Valley basis lb. .32 - —

Copper naphthenate, liq., 8% Cu, dms., frt. alld lb. .24 - —

Copper nitrate, tech., cryst., dms., works lb. .33¼- —

Copper oleate, solid, 9% Cu, dms., works lb. .45 - —

Copper oxide, black, bbls., 100-1,999-lb. lots, works lb. .50 - —

Copper oxide, red, 97%, USN Type I, bbls., 100-5,000-lb. lots. lb. .61 - —

90%, USN Type II, bbls., 100-5,000-lb. lots or more, works. lb. .60½- —

Copper oxychloride, dms., c.l., works lb. .52 - —

dms., l.c.l., works lb. .53½- .63½

Copper quinolinolate, fib. dms. lb. 4.25 - 4.50

Copper resinate, precip., dms., frt. alld lb. .34 - —

Copper sulfate, CP, gran., dms., works lb. .1980- —

Cryst., 99%, bgs., c.l., works. 100 lbs.12.90 - —

bgs., l.c.l., same basis 100 lbs.13.40 -15.90

Monohydrated, 35%, dms., c.l., works 100 lbs.22.50 - —

dms., l.c.l., works 100 lbs.23.25 - —

Tribasic, distributors, bgs., c.l., same basis 100 lbs.28.00 - —

l.c.l., same basis 100 lbs.29.00 -33.00

Copper undecylenate, dms lb. 2.00 - 3.00

Copra, Atl., Gulf ports, c.i.f. ton.152.50 - —

Pac. ports, c.i.f. lb.147.50 - —

Coriander oil, USP, bots. lb.10.50 - —

Coriander seed, Moroccan, bgs. lb. .12 - —

Rumanian, bgs lb. .09 - .09½

Yugoslavian, bgs. lb. .08½- —

Corn oil, crude, tanks, works lb. .13⅛- —

Foots (soapstock), acid 95%, tanks, New York lb. .06 - .06¼

Refd., salad, dms lb. .1954- .2000

tanks lb. .1754- —

Corn oil acids, dist., dms. lb. .16¾- .18⅜

tanks lb. .14¾- —

Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs. min. 100 lbs. 7.32 - —

paper bgs., l.c.l. 100 lbs. 7.57 - —

Corn syrup, 42°, non-ret. dms., c.l., 100 lbs. 7.30 - —

non-ret. dms., l.c.l. 100 lbs. 7.45 - —

Corrosive sublimate (see Mercuric chloride).

Costus oil, bots. oz. 6.00 - —

Cortisone acetate, NNR, bulk gram. 3.50 - 3.55

Cottonseed meal, 41% bgs., Memphis ton.54.50 - —

Cottonseed oil, crude, tanks, South, East lb. .12⅞ Nom.

tanks, Valley lb. .12⅞ Nom.

tanks, Texas, Lubbock lb. .12⅝ Nom.

tanks, Waco lb. .12⅞ Nom.

Foots (soapstock), acid 95%, tanks, New York lb. .05⅛- —

Refd., salad, dms. lb. .18⅜- .18½

tanks lb. .16⅜- —

Cottonseed oil acids, dist., dms lb. .15¾- .17¾

tanks lb. .13¾- —

Cottonseed pitch, raw, dms., works. lb. .03 - .03¼

tanks, same basis lb. .02¾- —

Cramp bark, NF, bls lb. .85 - .90

Coumarin, NF, cryst, dms lb. 3.60 - —

Cream of tartar (see Potassium bitartrate).

Creosote carbonate, NF, bots., cbys., lb. 3.05 - 3.26

Creosote, coaltar, crude, tanks, works, frt. adjusted gal. .24 - —

soln., 80%, tanks, works gal. .226 - —

Refd., dms., c.l., works gal. .42 - .44

dms. l.c.l. same basis gal. .53 - .55

tanks same basis gal. .33 - .35

Creosote oil (see Creosote coaltar).

Creosote, wood, beachwood, cbys., dms lb. 1.60 - 1.65

Hardwood, NF, bots., cbys lb. 1.30 - —

Pinewood, dms., incl., c.l., works. lb. .0561- —

dms. incl., l.c.l., works lb. .0634- —

dms. incl., l.c.l., ex whse, New York lb. .0745- —

tanks, works lb. .0460- —

2,3-Cresotic acid, dms., ton lots, works lb. .70 - —

dms., smaller lots, works lb. .72 - —

Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., frt. equald lb. .1625- —

non-ret. dms., l.c.l., same basis lb. .1675- —

tanks, same basis lb. .145 - —

USP, non-ret. dms., c.l., same basis lb. .1775- —

non-ret. dms., l.c.l., same basis lb. .1825- —

tanks, same basis lb. .16 - —

m-Cresol, 95-98%, dms., c.l., works. lb. .60 - —

dms., l.c.l., works lb. .61 - —

m-p-Cresol, 5-95%, 3°C., dms., c.l., frt. equald lb. .1775- —

dms., l.c.l., same basis lb. .1825- —

tanks, same basis lb. .16 - —

m-p-Cresol, 2.97%, 2°C., dms., c.l., frt. equald lb. .2175- —

dms., l.c.l., same basis lb. .2225- —

tanks, same basis lb. .20 - —

o-Cresol, m.p. 30.5°C. and over, ret. dms., c.l., frt. equald lb. .16¾- —

ret. dms., l.c.l., same basis lb. .17¼- —

tanks, same basis lb. .15 - —

m.p. 30°30.49° C., dms., c.l., frt. equald lb. .16¼- —

ret. dms., l.c.l., same basis lb. .16¾- —

tanks, same basis lb. .14½- —

m.p., 29°-29.9° C., dms., c.l., frt. equald lb. .15¾- —

ret. dms., l.c.l., same basis lb. .16¼- —

tanks, same basis lb. .14 - —

m.p., 25° 28.9°C., dms., c.l., frt. equald lb. .14¾- —

ret. dms., l.c.l., same basis lb. .15¼- —

tanks, same basis lb. .13 - —

p-Cresol, 98%, dms., c.l., dlvd lb. .50 - —

dms., l.c.l., dlvd lb. .51 - —

tanks, dlvd. lb .49 - —

p-Cresyl methyl ether, cns lb. 1.80 - 2.05

Cresylic acid, coaltar, dom., resin and tricresyl phosphate grade, 50%, 207° or above, tanks, frt. equald gal. 1.10 - —

50%, 204°to 207° C., tricresyl phosphate grade, tanks, frt. equald gal. 1.10 - —

50% 204°to 207° C., resin grade, tanks, frt. equald. gal. 1.20 - —

Cresylic acid, non-resin grade, 50%, 210° or above, total range over 9° C., dms., c.l., frt. equald.gal. 1.15 - —

dms., l.c.l., frt. equald gal. 1.19 - 1.20

tanks, frt. equald gal. 1.00 - —

Imp., 75% at 215° C. or over, dms., ex whse gal. .95 - —

Cresylic acid, petroleum, dom., 195° to 214°C., non-ret. dms., 65 to c.l., works, San Francisco and Los Angeles gal. .80 - —

non-ret. dms., l.c.l., same basis gal. .82 - .84

tanks, same basis gal. .65 - —

200° C. to 232° C., tanks, Wilmington, Cal lb. .65 - .72

211° C. to 237° C., non-ret. dms., c.l., San Francisco and Los Angeles gal. .76 - —

non-ret. dms., l.c.l., same basis gal. .78 - 80

tanks, same basis gal. .61 - —

220° C. to 242° C., tanks, Wilmington, Cal. lb. .62 - .67

245° C. to 295° C., tanks, Wilmington, Cal gal. .50 - —

Crotonaldehyde 91 93% dms., t.c.l., works lb 24¼ 25

Crotonic acid, fib. dms., 200 lbs. or more, works lb. .50 - —

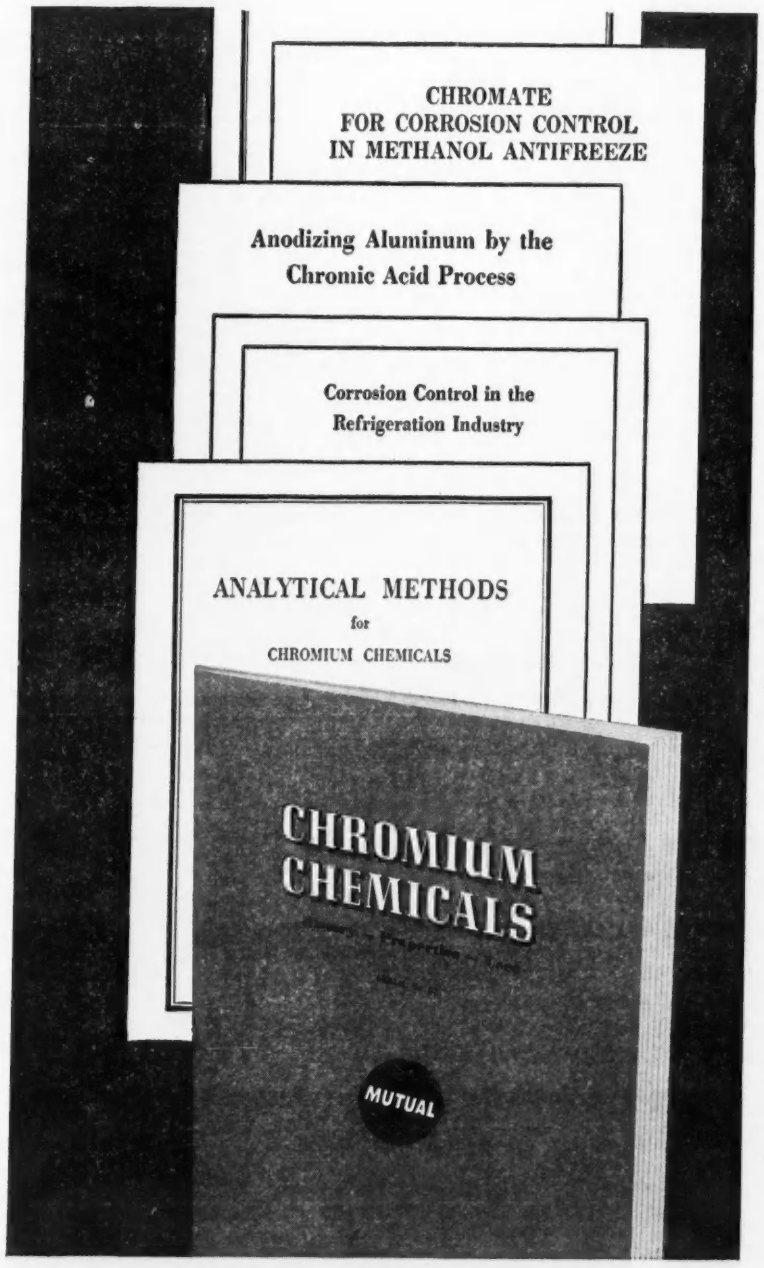
Cryolite, nat. indust., bgs., c.l., works 100 lbs 13 00 —

l.c.l. works 100 lbs 14 25 —

Cube root, powd. 5% rotenone. bgs. c.l. t.l. works lb. 29 —

Cubeb berries XX, NF, bgs lb. 70 - —

powd. cs lb. .85 —



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Cubeb Oil—Dicyclohexyl Phthalate

Cubeb oil, cns.	lb.	4.10	- 4.25
Cumene dms., c.l., works	lb	12	—
l.c.l. works	lb	14	—
tanks works	lb	11	—
Cumin seed, Iranian bgs	lb	.18½	—
Moroccan, bgs	lb	22	.23
Turkish, bgs.	lb	N.P.	
Cumin oil, bots., cns.	lb.	4.75	- 5.00
Cutch extract 55% tannin bgs ex dock, duty extra	lb.	.08	- —
Cyanamide fertilizer mixing grades 21% N, gran. bgs. Niagara Falls Ont. contract	ton	55.00	—
pulv. 21% N bgs works unit ton		2.75	—
Indust. grade, bgs., c.l., works	ton	75.00	- —
l.c.l., works	ton	96.00	- —
8-16 mesh dms. c.l. works	ton	120.00	—
l.c.l. works	ton	140.00	—
Cyanoacetic acid, tech., bbls	lb.	.90	- 1.25
Cyclohexane 99% tech dms. c.l. works	gal	70	—
l.c.l. works	gal	72	—
tanks works	gal	55	—
Cyclohexanol, tech., Zone 1, dms., c.l., t.l., works, frt. alld	lb.	.26½	—
l.c.l., works, same basis	lb.	.27½	—
Zone 2, dms., c.l., t.l., works, frt. alld	lb.	.28	- —
l.c.l., l.t.l.,	lb.	.30	- —
tanks, works, same basis	lb.	.24	- —

Zone 1 comprises all Continental U. S. East of the eastern boundaries of Montana, Idaho, Utah, and Arizona. Zone 2 comprises the remaining states.

Cyclohexanone, tech. dms., c.l., works	lb	32½	—
l.c.l. works	lb	35	—
tanks, works	lb	29	—
Cyclohexene, min. 98% b.r., 82.5°C. 85°C. 360 lb dms., c.l., works	lb	55	—
l.c.l. same basis	lb	60	—
tanks, same basis	lb	52	—
Cyclohexylamine dms. c.l. works	lb	49	- —
l.c.l., works	lb.	50	- —
tanks, works	lb	47	—
Cyclopropane CP 2-lb cyls works	cyl	48.00	—
6 oz. cyls., works	cyl	12.00	—
USP, hospitals cyls. 40-gal lots	gal	.68	—
100 gal lots	gal	37	—
200-gal lots	gal	36	—
Cypress oil, bots	lb.	5.30	- —

D

2-4-D, tech., bgs., dms., c.l., works, frt. equald	lb.	.37	- —
l.c.l., same basis	lb	42	46
Butyl ester dms. c.l. works	lb	40	—
l.c.l. same basis	lb	45	49
tanks, same basis	lb	39	—
Isopropyl ester dms. c.l. works	lb	40	—
l.c.l. works	lb	45	49
tanks, works	lb	39	—

Dammar gum, Batavia, a/E, cs	lb.	No stocks	
dust, bgs.	lb.	.16	Nom.
E, bgs	lb.	.20	Nom.
East India, batu, bold, bgs	lb.	.13¾	- .15
nubs and chips, bgs.	lb.	.08¼	- .09½
black, bold, bgs.	lb.	.14½	- .16½
unscraped, bgs	lb.	.12	- .13½
nubs and chips, bgs.	lb.	.11½	- .13
pale, chips, bgs.	lb.	.13	- .15
nubs, bgs	lb.	.17¾	- .20
Dammar gum, Siam, cs	lb.	.37½	- .40
Singapore, No. 1, bgs	lb.	.44¼	- .47
No. 2 bgs.	lb.	.32	- .34
No. 3, bgs.	lb.	No stocks	
dust, bgs.	lb.	.17	- .19
seeds, bgs	lb.	No stocks.	
Dandelion root bls	lb	32	—
DDD tech. flake grd fib dms., c.l works	lb	45	—
t.c.l. works	lb	46	—
DDT powder bgs c.l works, frt equald	lb	23	27
smaller lots same basis	lb	24	28
fib dms. c.l., same basis	lb	24	28
smaller lots same basis	lb	25	29
1-Decanol tech. dms. c.l. dlvd	lb	41	—
l.c.l dlvd	lb	43	—
tanks dlvd	lb	38½	—
Decyl alcohol, mixed isomers, dms., c.l., dlvd	lb.	.23½	- —
dms., l.c.l., dlvd	lb.	.24½	- —
tanks, dlvd.	lb.	.21	- —
Perfume grade, bots	lb.	1.75	- 2.00
Decyl alcohol, normal (see 1-Decanol).			
Deertongue leaves, bls	lb	45	- —
Defluorinated phosphate feed grade 13% P paper bgs., c.l. t.l., works	ton	49.50	- —
17%P paper bgs. c.l., t.l. works	ton	58.00	- —

Defluorinated paraffin, feed grade, 18% P. paper bgs., c.l., t.l., works	ton.	64.10	- —

Prices of defluorinated phosphate in bulk $3 per ton less than bag carlot prices.

Degras, common, bbls	lb.	.10	.12
neutral, bbls	lb.	.21	.23
Denatured alcohol, ethyl, CD-12, CD-13, CD-14, CD-17, dms., c.l., dlvd., E of Rockies.	gal.	.64½	- .66
dms., l.c.l., same basis	gal	.69½	- .77
tanks, dlvd., same basis	gal.	.48½	- .50

Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.

Denatured alcohol, ethyl, proprietary solvent, dms., c.l., dlvd. E of Rockies	gal.	.66	- —
dms., l.c.l., same basis	gal.	.71	- .77
tanks, same basis	gal.	.50	- —

Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.

Denatured alcohol, ethyl, SD1, dms., dlvd. E. of Rockies	gal.	.65½	- —
dms., l.c.l., same basis	gal.	.70½	- .76½
tanks, same basis	gal.	.49½	- —
SD2B, dms., c.l., dlvd. E. of Rockies	gal.	.64	- —
dms., l.c.l., same basis	gal.	.69	- .75
tanks, same basis	gal.	.48	- —
SD3A, dms., c.l., dlvd. E. of Rockies	gal.	.63	- —
dms., l.c.l., same basis	gal.	.68	- .74
tanks, same basis	gal.	.47	- —
SD23A, dms., c.l., dlvd. E. of Rockies	gal.	.655	- —
dms., l.c.l., same basis	gal.	.705	- .765
tanks, same basis	gal.	.495	- —
SD23H, dms., c.l., dlvd. E of Rockies	gal.	.66	- —
dms., l.c.l., same basis	gal.	.71	- .77
tanks, same basis	gal.	.50	- —
SD29, dms., c.l., dlvd. E. of Rockies	gal.	.645	- —
dms., l.c.l., same basis	gal.	.695	- .755
tanks, same basis	gal.	.485	- —
SD30, dms., c.l., dlvd. E. of Rockies	gal.	.63	- —
dms., l.c.l., same basis	gal.	.68	- .74
tanks, same basis	gal.	.47	- —
SD35A, dms., c.l., dlvd. E. of Rockies	gal.	.66	- —
dms., l.c.l., same basis	gal.	.71	- .77
tanks, same basis	gal.	.50	- —

For anhydrous alcohol, on above formulas, prices are 7c. per gallon higher.

SD40, dms., c.l., dlvd. E. of Rockies	gal.	.64	- —
dms., l.c.l., same basis	gal.	.69	- .75
tanks, same basis	gal.	.48	- —

West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon and Washington, where a 5c. differential on tankcars is maintained.

d-Desoxyephedrine hydrochloride, bots	lb.	24.00	25.00
dl, bots	lb	6.50	—
Dextrin, corn gum, paper bgs., c.l.	100 lbs.	9.33	—
l.c.l.	100 lbs.	9.48	—
canary, dark, paper bgs., c.l	100 lbs.	9.17	—
l.c.l.	100 lbs.	9.32	—
light paper bgs., c.l	100 lbs.	9.07	—
l.c.l.	100 lbs.	9.22	—
white paper bgs., c.l.	100 lbs.	8.91	—
l.c.l.	100 lbs.	9.06	—
Corn dextrin in cotton bgs 15c per 100 lbs higher			
Potato imported bgs	lb.	10½	.11
Dextrose USP dms	lb	.17¾	—
Diacetone alcohol, acetone - free, dms., c.l., dlvd	lb.	.15	- —
dms., l.c.l., dlvd	lb.	.16	- —
tanks, dlvd	lb.	.125	- —
Tech., dms., c.l., dlvd	lb.	.145	- —
dms., l.c.l., dlvd	lb.	.155	- —
tanks, dlvd	lb.	.12	- —
Diacetyl flavor grade bots	lb.	4.25	5.50
Di-sec-amyl phenol, dms., c.l., works	lb.	.32	—
l.c.l. works	lb.	.33	—
tanks, works	lb.	.29½	—
Di-tert-amyl phenol, dms., l.c., works	lb.	.32	—
l.c.l. works	lb.	.33	—
tanks, works	lb.	.29½	—
o-Dianisidine fib. dms	lb	2.00	—
Dibenzyl sebacate, dms., c.l., works.	lb.	.89¾	.90
l.c.l. same basis	lb.	.90¼	.91
tanks, same basis	lb.	.88	—
o-Dibromobenzene bgs., 500-lb lots.	lb.	.55	—
Dibutyl fumarate, dms., c.l., t.l., frt. alld.	lb.	.33	- —
l.c.l., l.t.l., frt. alld	lb.	.34	- —
tanks, frt. alld	lb.	.30½	- —
Maleate, dms., c.l., t.l., frt. alld.	lb.	.33	- —
l.c.l., l.t.l., dms., frt. alld	lb.	.34	- —
tanks, frt. alld	lb.	.30½	- —
Phthalate, dms., c.l., dlvd. E	lb.	.32½	- —
l.c.l., same basis	lb.	.33½	- —
tanks, same basis	lb.	.30	—
Sebacate, dms., c.l., works	lb.	.66	—
l.c.l. works	lb.	.66½	.67
tanks, works, dlvd	lb.	.64	.64½
Tartrate dms works, frt. alld.	lb.	.64	—
Dibutylamine, dms., c.l., dlvd	lb.	.55½	- —
l.c.l. same basis	lb.	.56½	- —
tanks, same basis	lb.	.53	—
2,6-Di-tert-butyl-p-cresol, food grade, dms. t.l. c.l., dlvd	lb.	1.20	—
l.t.l., dlvd	lb.	1.24	—
tech., dms., c.l.	lb.	.91	- —
l.c.l.	lb.	.95	- —
tanks	lb.	.86	- —
Dicaprylphthalate dms. c.l. dlvd.,	lb.	.31	.32
l.c.l. dlvd	lb.	.32	.33
tanks, dlvd	lb.	.27½	—
Sebacate, dms., c.l., works	lb.	.63	—
l.c.l. works	lb.	.63½	.64
tanks, works	lb	.61	—
Dichlorophenoxyacetic acid, (see 2,4-D).			
2,5-Dichloroaniline, dms. works	lb.	.83	—
o-Dichlorobenzene dms. c.l., frt. alld. E	lb.	.12¼	- —
l.c.l. same basis	lb.	.13¼	- —
tanks, same basis	lb.	.10¾	- —
p-Dichlorobenzene, dms., c.l., f.o.b., works	lb.	.12	- .14¼
l.c.l. same basis	lb.	.17	—
1,4-Dichlorobutane, dms. c.l. or t.l., works	lb.	.33½	- —
l.c.l. or l.t.l. works	lb	.34	- —
tanks, works	lb	.32	- —
Dichlorodiphenyltrichlorothane (see DDT).			
Dichloropentanes, dist., dms., c.l., works	lb.	.05	- —
l.c.l. works	lb.	.06	- —
tanks, works	lb.	.03	- —
Dicyclohexylamine, dms. c.l. works	lb.	.54	- —
l.c.l., works	lb.	.55	- —
tanks, works	lb.	.52	- —
Dicyclohexyl phthalate fib. dms., c.l. works, frt. alld	lb.	.58¼	.59
l.c.l. same basis	lb	.59¼	.60

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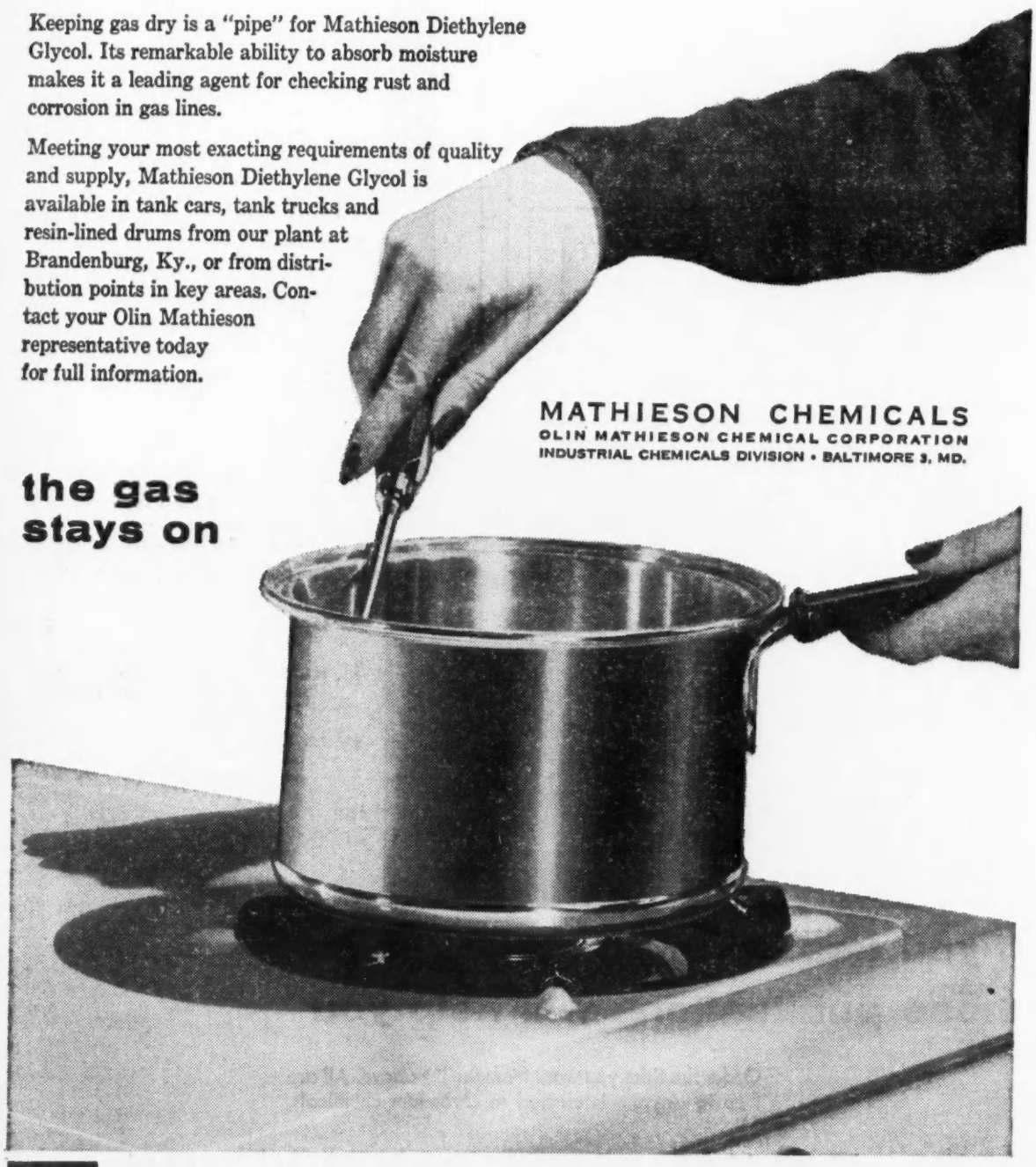

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ORGANICS: Ethylene Oxide • Ethylene Glycols • Polyethylene Glycols • Glycol Ether Solvents • Ethylene Dichloride • Dichloroethylether • Formaldehyde • Methanol Sodium Methylate • Hexamine • Ethylene Diamine • Polyamines • Ethanolamines • Trichlorophenol • Surfactants

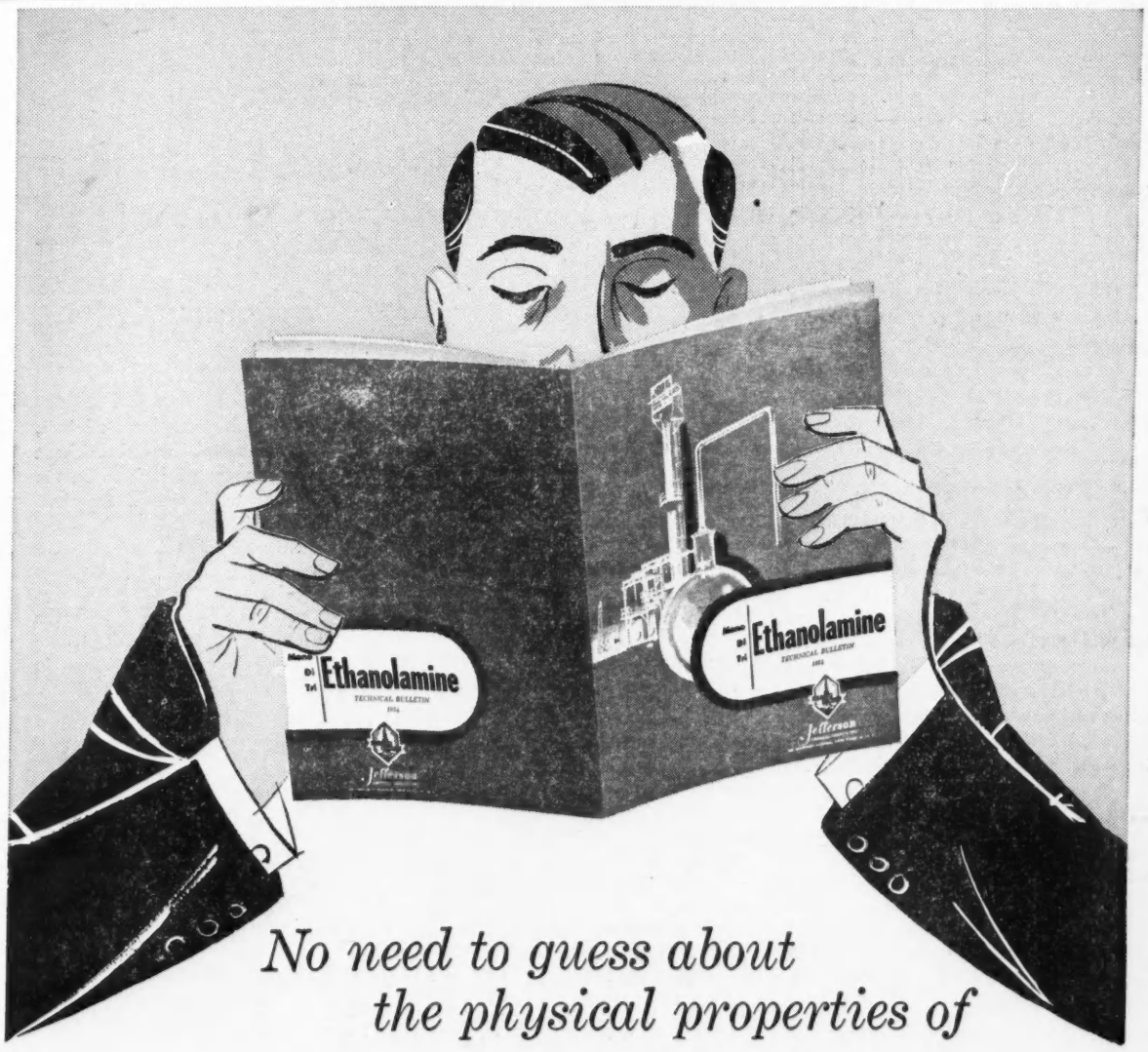
4895

Didecyl phthalate, dms., c.l., works	lb.	.34	—
l.c.l. same basis	lb.	.35	—
tanks same basis	lb	31½	—
Dieldrin dms frt alld	lb	1.80	—
l.c.l. frt alld	lb	1.85	—
Diethanolamine dms. c.l., dlvd E	lb.	.27	—
l.c.l. same basis	lb.	.28	—
tanks same basis	lb	24½	—
Diethyl barbituric acid (see Barbital).			
Diethyl carbonate dms., c.l., frt. alld	lb	47	—
l.c.l. same basis	lb	48	—
tanks same basis	lb	45	—
Ethanolamines, dms. c.l. dlvd.	lb.	69½	—
l.c.l. dlvd	lb.	70½	—
tanks dlvd	lb	67	—
Oxalate dms., c.l., frt. alld	lb	42	—
l.c.l same basis	lb	43	.45
tanks same basis	lb	40	—
Diethyl phthalate, dms., c.l., dlvd.	lb.	.30	.30½
l.c.l., dlvd	lb.	.31	.31½
tanks, dlvd	lb	.27½	.28
Sulfate, dms., c.l., works	lb	19	—
l.c.l. works	lb.	19¾	—
tanks, works	lb	17	—
Diethylamine dms. c.l. dlvd. E	lb	.51	—
l.c.l. same basis	lb.	.52	—
tanks, same basis	lb	48½	—
N,N-Diethylaniline dms., c.l., frt. alld	lb.	.57	—
l.c.l. same basis	lb.	.58	—
tanks, same basis	lb.	.55	—
Di-2-ethylhexyl adipate (see Dioctyl adipate).			
Phthalate (see Dioctyl phthalate).			
Diethylene glycol dms c l dlvd E	lb.	.17¾	—
l.c.l. same basis	lb.	.18¾	—
tanks, same basis	lb.	.15¼	—
Boriborate dms. l.c.l.	lb.	.31	—
Diethyl ether dms. c.l., works	lb.	47½	—
l.c.l., works	lb.	48¼	—
Monobutyl ether dms., c.l., dlvd. E	lb.	.30¾	—
l.c.l. dlvd E	lb.	.31¾	—
tanks, dlvd E	lb.	.28¼	—
Acetate, dms. c.l., works.	lb.	.30¼	—
l.c.l., works	lb.	.31	—
tanks, dlvd E	lb.	.28¼	—
Monoethyl ether, dms., c.l., dlvd	lb.	.22½	—
l.c.l., dlvd	lb.	.23½	—
tanks, dlvd	lb.	.20	—
Acetate, dms., c.l., works.	lb.	.27¼	—
l.c.l. works	lb	.28	—
tanks, dlvd E	lb.	.25¼	—
Monomethyl ether dms., c.l., dlvd	lb.	.20½	—
l.c.l., dlvd	lb.	.21½	—
tanks, dlvd.	lb.	.18½	—
Diethylenetriamine dms., c.l. dlvd E	lb.	44	—
l.c.l. dlvd E	lb.	45	—
tanks, dlvd E	lb	41½	—
Diethylstilbestrol, USP, bots., 10-kilo lots	kilo.	100 00	147 50
1 kilo lot	kilo.	110 00	152 50
Digitalis leaves, USP dom dms.	lb.	1.25	—
Digitoxin, USP, bots	gram.	4.40	5.00
Diglycol laurate, dms	lb.	.32¾	.34
Stearate dms., ton lots	lb.	.26	.28
Diglycolic acid, bgs., works	lb.	.14	—
Dihexyl sebacate dms c.l. works.	lb.	.64	—
l.c.l. works	lb.	.64½	.65
tanks works	lb	62	—
Dihydrazine sulfate, dms., works.	lb.	1.10	1.25
Dihydrostreptomycin hydrochloride, bulk	gram.	.0850-	.0875
Sulfate, bulk	gram.	.0850-	.0875
1,2-Dihydroxy anthraquinone, dms., works	lb.	2.75	—
2,2-Dihydroxy-5-5-dichloro diphenyl-methane, pure, dms	lb.	2.55	—
tech., dms	lb.	1.09	—
Di-isobutyl ketone, dms., c.l., dlvd.	lb.	.17	—
l.c.l dlvd	lb.	.18	—
tanks, dlvd	lb.	.14½	—
Phthalate, dms., c.l., dlvd E	lb.	.31½	—
l.c.l., same basis	lb.	.32½	—
tanks, same basis	lb.	.29	—
Di-isobutylene, dms., c.l., dlvd. E	lb.	.10	—
l.c.l., dlvd E	lb.	.11½	—
tanks dlvd E	lb.	.08	—
Di-iso-octyl phthalate, dms., c.l., dlvd	lb.	.31	—
l.c.l. same basis	lb.	.32	—
tanks, same basis	lb.	.28½	—
Sebacate, dms., c.l. works	lb.	.63½	—
l.c.l., works	lb.	.64½	—
tanks works	lb.	.61	—
Di-isopropanolamine, dms., c.l., dlvd.	lb.	.23¼	—
l.c.l. same basis	lb.	.24¼	—
tanks same basis	lb.	.20¾	—
Di-isopropylamine, dms., c.l., dlvd. E. of Rockies	lb.	.50½	—
l.c.l., same basis	lb.	.51½	—
tanks, same basis	lb.	.48	—
Dillseed, dewhiskered, bgs	lb.	.09¼	—
nat., bgs	lb.	.08	—
Dillseed oil, bots	lb.	2.80	4.25
Dillweed oil, dom., bots., dms	lb.	3.25	4.25
Dimethyl anthranilate, cns	lb.	4.35	5.10
Ethanolamines, anhyd., dms., c.l., dlvd	lb.	1.225	—
l.c.l., dlvd	lb.	1.235	—
tanks, dlvd	lb.	1.20	—
70% dms. c.l., dlvd. 100% basis, contained amines	lb.	.68½	—
l.c.l. dlvd. 100% basis	lb.	.69½	—
tanks, dlvd 100% basis	lb.	.66	—
Hydroquinone, dms	lb.	2.20	2.25
Phthalate, dms., c.l., works	lb.	.31	—
l.c.l. works	lb.	.32	—
tanks, works	lb.	.28½	—
Sebacate dms. c.l., works	lb	1.275	—
l.c.l. dlvd	lb	1.285	—
tanks works	lb	1.25	—
Sulfate, 55-gal. ret, dms., c.l., works	lb.	.15	—
l.c.l. works	lb	.16	—
10-gal ret dms. l.c.l. works.	lb.	.16½	—
Dimethylamine 25% soln. dms., c.l., frt. equald	lb.	42	—
l.c.l. frt equald	lb.	42½	—
tanks, frt. equald	lb.	.33	—
40% soln. dms. c.l. frt. equald	lb.	.39	—
l.c.l. frt. equald	lb.	.39½	—
tanks, frt. equald	lb.	.33	—
N,N-Dimethylaniline, dms., c.l., frt. alld	lb.	.32	—
l.c.l. frt alld	lb.	.33	—
tanks, frt. alld	lb.	.30	—
N,N-Dimethylformamide dms., works.	lb.	.34	.39
tanks works	lb.	.33	—
2,4-Dinitroaniline dms., 1,000-lb. lots, same basis frt. equald	lb.	.68	—
smaller lots frt equald	lb.	.71	—
Dinitroaniline orange toner, CP	lb.	1.50	—
m-Dinitrobenzene, 85°C. dms	lb.	.22	—
99°C., dms	lb.	.24	—
2,4-Dinitrochlorobenzene crystallizing at 46½°C., dms., c.l., frt alld. E	lb.	15¼	—
l.c.l., frt. alld E	lb.	15¾	—
tanks, frt. alld E	lb.	.15	—

2,4-Dinitrochlorobenzene, crystallizing at 48°C., dms., c.l., frt. ald. E	lb.	.20¼	—
l.c.l. frt alld E	lb.	.20¾	—
tanks, frt. alld. E	lb.	.20	—
2,4-Dinitrophenol, bbls	lb.	.37	—
2,4-Dinitrotoluene, oily, dms	lb.	.11	—
refd., 63°C., dms	lb.	.23	—
Dioctyl adipate, dms., c.l., works.	lb.	.42½	—
l.c.l. works	lb.	.43½	—
tanks, works	lb.	40	—
Phthalate dms., c.l., frt. alld	lb.	.30½	.31
l.c.l., frt. alld	lb.	.31½	.32
tanks, frt. alld	lb.	.28	.28½
Dioctyl sebacate, dms., c.l., works.	lb.	.60½	—
l.c.l., works	lb	.61½	62½
tanks, works dlvd	lb	58	58½
1,4-Dioxane, dms., c.l. works	lb	28¾	—
l.c.l. same basis	lb	29¼	—
tanks, same basis	lb	.27	—
Dip oil (see Tar acid oil).			
Dipentaerythritol bgs. l.c.l. works.	lb	35	—
Dipentene, dest-dist. dms., c.l., works	gal.	47	—
l.c.l., works	gal.	52	—
ex-whse	gal.	62	—
steam-dist., dms., c.l., works, South.	gal.	.59	—
dlvd. N. Y.	gal.	67	—
tanks, works, South	gal	45	—
Diphenyl, bbls., c.l. works	lb	15	—
l.c.l., works	lb	16	—
Diphenyl in bags ¼c lower			
Oxide, perfume grade cns	lb	.56	61
Phthalate dms. c.l. works	lb	51¾	—
l.c.l. works	lb	.53¾	—

Diphenylamine, refd. flake bgs., c.l., works frt equald	lb.	.33	—
l.c.l. works, frt equald	lb.	.35	—
fused tanks works frt equald.	lb.	.31	—
tech fused tanks works, frt. equald	lb.	.30	—
Diphenylguanidine, bgs., dms., ton lots, frt. alld	lb.	.52	—
smaller lots, frt. alld	lb.	.53	—
Diphenylhydantoin-sodium USP dms	lb	5.00	5 60
Dipropylene glycol dms c.l., frt. alld	lb.	.17¾	—
l.c.l. same basis	lb.	.18¾	—
tanks same basis	lb	15¼	—
Monomethyl ether dms., c.l., dlvd E	lb	20	—
l.c.l. same basis	lb	21	—
tanks same basis	lb	18½	—
Dithiodibenzoic acid, dms., 1,000-lb. lots, works	lb.	1.45	—
Di-o-tolylguanidine, dms., ton lots, frt. alld	lb	.62	—
smaller lots, frt. alld	lb	.63	—
Divi-divi, 45% tannin, bgs., bls. c.l. U S ports exdock	ton.	80.00	—
Divinylbenzene 20-25% dms., c.l., works, frt equald	lb	20	—
l.c.l same basis	lb	21	—
tanks same basis	lb	19	—
50-60% dms. c.l. works, 100% basis	lb	1.00	—
l.c.l. works 100% basis	lb	1.05	—

Dodecylbenzene dms. c.l., frt alld	lb	14	—
l.c.l. same basis	lb	15	—
tanks same basis	lb	12	—
Dyes coaltar certified colors for food drugs and cosmetics. 500-lb and 1-lb lots, dlvd:—			
Blue, FD & C No 1	lb	15 65	17 60
No 2	lb	15 65	17 60
Green FD & C, No 1	lb	15 65	17 60
No 2	lb	19 60	22.85
No 3	lb	21 30	35 90
Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb and 1-lb. lots, dlvd:—			
Red, FD & C No 1 cns	lb	5.90	7 85
No 2	lb	3.30	4.10
No 3	lb	19.60	22.85
No 4	lb	5.55	7 50
Violet FD & C, No 1, cns	lb	15 65	17 60
Yellow FD & C No 1, cns	lb	9 15	11 05
No 5	lb	3.30	4 10
No 6	lb	3.20	4.10
Dyes, coaltar, certified colors for drugs and cosmetics, 200 lb and 1 lb lots dlvd:—			
Black D&C, No 1	lb	10.50	10 95
Brown D&C No 1	lb	15 65	16 10
Green D&C No 5	lb	15.65	16.10
No 6	lb	15 65	16.10
No 7	lb	14.35	14 80
Orange, D&C No 3	lb	10.50	10 95
No 4	lb	19.60	20.05
No 5	lb	5 25	5 70



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Dyes, coaltar, certified colors for drugs and cosmetics, 200 lb. and 1 lb. lots, dlvd.:—

Red, D&C, No. 17	lb	10.50	10.95
No 18	lb	23.35	24.00
No 19	lb	15.00	15 45
No 21	lb	3.10	3.60
No 22	lb	10 50	10 95
No. 28	lb	24.20	24.65
No 33	lb	17 00	17 45
Violet, D&C, No 2	lb	15 65	16 10
Yellow D&C, No 7	lb	10 50	10 95
No 8	lb	10 50	10 95
No 10	lb	13.05	13 50
No 11	lb	13.05	13.50

Dyes coaltar certified colors for drugs and cosmetics, external use, 500-lb. and 1-lb. lots dlvd.:—

Blue Ext. D&C, No 1 cns	lb	15 65	16 10
Green Ext. D&C, No. 1, cns	lb	15 65	16 10
Red Ext. D&C, No 1 cns	lb	13 05	13 50
Yellow Ext. D&C No 1 cns	lb	10.50	10.95

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype) contract, dlvd. No.

20	Chrysoidine Y, dustless	lb	.89	—
27	Fast light, orange 2G	lb.	1.29	—
31	Phloxine 2G	lb	1.05	—
36	Yellow 2G	lb	1.18	—
40	Orange R, extra, conc	lb	1.52	—
57	Fuchsine 6B	lb.	1.55	—
79	Scarlet 2R	lb.	1.16	—
151	Orange AD	lb.	.79	—

Dyes, coaltar, for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract, dlvd No.

161	Orange RR	lb.	.94	—
176	Fast red A	lb.	1.39	—
179	Rubine XX conc	lb.	1.48	—
180	Blue F4B	lb.	1.31	—
185	Brilliant scarlet 3RN, conc.	lb.	1.20	—
202	Chrome blue black R, conc.	lb.	1.07	—
203	Chrome black T	lb.	.94	—
208	Fast blue SR	lb.	1.30	—
216	Chrome red B	lb.	1.08	—
234	Brown Y	lb	1.27	—
246	Blue black, extra, conc	lb.	1.37	—
275	Milling red 3R, conc	lb.	1.91	—
289	Navy blue 3R conc	lb	1.70	—
299	Black F, conc	lb.	2.19	—
304	Neutral black 2B, conc.	lb.	2.61	—
326	Fast scarlet 4BNC	lb.	2.12	—
332	Bismark brown RX, conc., dustless	lb.	1.37	—
365	Brilliant yellow, conc	lb	3.67	—
382	Scarlet B	lb.	2.60	—
401	Diazo black BHD	lb.	.93	—
406	Blue 2B, extra conc	lb.	1.53	—
419	Red FC	lb.	1.45	—
420	Brown M	lb.	1.40	—
448	Red 4BX, conc	lb.	1.69	—
518	Diamine sky blue FF, extra, conc	lb.	1.95	—
561	Brown B	lb.	2.89	—

Dyes, coaltar, for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract, dlvd No.

581	Black EB, 200%	lb.	1.13	—
593	Green BY, conc	lb.	1.03	—
596	Yellow brown K, extra	lb.	1.26	—
620	Yellow 2G	lb.	1.31	—
639	Fast Yellow GG	lb.	2.32	—
640	Yellow XX	lb.	2.30	—
655	Yellow OX	lb.	2.64	—
657	Green V	lb.	2.73	—
662	Brilliant green G	lb.	3.62	—
667	Milling green 6B, conc	lb.	4.78	—
671	Blue EG	lb.	1.98	—
681	Crystal violet powder	lb.	2.15	—
698	Violet 6BN powder	lb.	2.25	—
720	Brilliant blue BBG	lb.	2.44	—
729	Blue B, extra conc	lb.	3.61	—
749	Red BX	lb.	5.62	—
800	Chinoline yellow ZSS	lb.	2.67	—
814	Yellow NN, conc	lb.	3.67	—
841	Safranine GF extra, conc.	lb.	4.11	—
860	Induline base ZM	lb.	1.07	—
865	Nigrosine J	lb.	4.76	—
922	Blue GXX	lb.	2.22	—
978	Black GXCF, conc	lb.	.38	—
1034	Alizarine red SC	lb.	2.85	—
1054	Alizarine blue SAPX	lb.	3.78	—
1078	Alizarine green CG, extra.	lb.	3.53	—
1085	Alizarine blue black B	lb.	3.02	—
1096	Golden orange GFD, single paste	lb.	2.58	—
1099	Dark blue BO, single paste.	lb.	2.28	—
1101	Jade green N supra double paste	lb.	1.10	—
1106	Blue RS, double paste	lb.	3.85	—
1113	Blue BLFD, double paste.	lb.	2.93	—
1150	Olive R, single paste dms., dlvd.	lb.	1.42	—

Dyes, coaltar, for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract, dlvd. No.

1151	Brown R, single paste	lb.	2.29	—
1171	Indigo synthetic, 20% paste.	lb.	.31	—
1217	Orange RD, double powder.	lb.	4.60	—
p-4	Brown PG	lb.	3.00	—
p-14	Brown EB	lb.	2.16	—
p-24	Gray L	lb.	2.08	—
p-90	Diazo brilliant scarlet ROAD	lb.	3.62	—
p-202	Diazo black VJ, conc	lb.	2.48	—
p-244	Brilliant scarlet BN	lb.	1.70	—
p-313	Naphthol SWF	lb	2.24	—

Dyes, coaltar, oil-soluble, 100-lb. drums., dlvd.

24	Oil orange Z-7078	lb	1.06	—
73	Oil scarlet BL	lb.	1.70	—
1073	Oil violet ZIRS	lb.	6.81	—
1078	Alizarine cyanine green base Z	lb	6.13	—
1080	Oil violet special Z	lb.	6.81	—
	Oil black ZBC	lb	4.46	—
	Oil black ZBD	lb	3.03	—
	Oil black ZHH	lb	4.61	—
	Oil black ZMM	lb	6.52	—
	Oil blue ZN	lb	8.02	—
	Oil blue ZV	lb	4.95	—
	Oil orange ZMG	lb	1.32	—
	Oil red Z-1700	lb	1.49	—
	Oil yellow ZG conc	lb	6.33	—

Dyes, coaltar, spirit soluble, 100 lb drms. dlvd.

p-517	Spirit yellow ZR	lb	4.62	—
p-520	Spirit orange ZR, conc	lb	5.87	—
	Spirit black ZRB	lb	2.95	—
	Spirit brown ZG	lb	5.30	—
	Spirit red ZB, conc	lb	6.41	—

E

Echinacea root, bls	lb.	1.10	—
Egg albumin (see Albumin).			
Yolk, dried, dom., bbls	lb.	1.01	1.03
tanners bbls	lb	.06	.06¼
Elm bark grinding, bls	lb.	.30	.32
powd., bbls., bxs	lb	.45	—
select, bundles	lb	.75	—
Emetine hydrochloride, USP bots	oz.	43.25	49.00
Endrin tech. dms. dlvd., 100% basis	lb	3.75	—
Eosin red toner, bbls., works	lb.	1.75	—
Ephedrine syn., USP, anhyd., bots. 100-oz lots	oz.	.93	1.00
hydrous bots. 100-oz lots	oz.	.92	—
Hydrochloride, tins, 100-oz. lots.	oz.	.65	.75
Sulfate, cryst., tins, 100-oz. lots.	oz.	.65	.72
powd., tins, 100-oz. lots	oz.	.66	.73
Epichlorohydrin, dms. c.l., dlvd.	lb.	.35½	—
l.c.l., dlvd	lb.	.36½	—
tanks, dlvd	lb	.33	—
l-Epinephrine, base syn., USP bots., 100 gram lots	gram.	.60	—
Epsom salt (see Magnesium sulfate)			
Erigeron oil, cns	lb.	5.50	7.50
Ergot NF dms tin-lined	lb	2.00	—
Eserine salicylate bots	oz.	72.50	84.00
Sulfate bots	oz.	87 75	—
Ester gum, gum-rosin type, dms., c.l., dlvd., Ill., Md., Ky., Mich., Mid-Atl. States, N. E. States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W. Va	lb.	.14½	.16
Wood-rosin type, dms., c.l., same basis	lb.	.15	.16
Ether (see specific product)			
Ethyl acetate nat. ferment 85-88% dms. c.l. frt. alld	lb.	.14½	—
l.c.l. frt. alld	lb.	.15½	—
tanks, frt. alld	lb.	.12	—
95-98% dms. c.l. frt alld.	lb.	.14¾	—
l.c.l., frt. alld	lb.	.15¾	—
tanks, frt. alld	lb.	.12¼	—
99% dms., c.l., frt. alld	lb.	.15	—
l.c.l., frt. alld	lb.	.16	—
tanks, frt. alld	lb.	.12½	—
syn., 85-88% dms., c.l., dlvd.	lb.	.14½	—
l.c.l. dlvd	lb.	.15½	—
tanks, dlvd	lb.	.12	—
95-98%, dms., c.l., dlvd	lb.	.14¾	—
l.c.l. dlvd	lb.	.15¾	—
tanks, dlvd	lb.	.12¼	—
99%, dms., c.l., dlvd	lb.	.15	—
l.c.l., dlvd	lb.	.16	—
tanks, dlvd	lb.	.12½	—
Acetoacetate dms., c.l., dlvd	lb.	.58½	—
	lb.	.58½	—
l.c.l., dlvd	lb.	.59½	—
tanks, dlvd	lb	.56	—
Acrylate, dms., c.l., t.l., dlvd.	lb.	.36	—
l.t.l. dlvd	lb	.37	—
tanks dlvd	lb	.34	—
Ethyl alcohol, 190 pf., USP, tax paid, dms., c.l., dlvd. E. of Rockies	gal.	20.58	—
dms., l.c.l., same basis	gal.	20.63	20.69
tanks, same basis	gal.	20.42	—
tax-free, dms., c.l., dlvd. E. of Rockies	gal.	.63	—
dms., l.c.l. same basis	gal.	.68	.74
tanks, same basis	gal.	.47	—
Ethyl alcohol, absolute, 200 pf., tax paid, dms., dlvd. E. of Rockies.	gal.	21.70	—
dms., l.c.l., same basis	gal.	21.75	21.81
tanks, same basis	gal.	21.54	—
Ethyl alcohol, denatured (see Denatured alcohol, ethyl).			
Aminobenzoate USP (see Benzocaine)			
Ethyl amyl ketone, dms., c.l., dlvd.	lb.	.20	—
l.c.l. same basis	lb.	.21	—
tanks, same basis	lb.	.17½	—
Benzoate, bots	lb.	.74	.90
Bromide tech. 98% dms., c.l., frt. alld. E	lb.	.44	.46
l.c.l., frt. alld. E	lb.	.46	.48
tanks, frt. alld. E	lb.	.41	.43
Butyl ketone, dms., c.l., works.	lb.	.36	—
l.c.l. works	lb.	.36¾	—
tanks, works	lb.	.34	—
Butyrate, works	lb.	.85	.90
Carbamate (see Urethane)			
Cellulose vis. 7 cps., bgs. 5,000-lb. lots or more works	lb.	.70	—
smaller lots, works	lb.	.72	.80
vis. 10, 20, 50, 100, 150 cps. bgs., 2,000-lb. lots or more, works	lb.	.65	.70
smaller lots, works	lb.	.67	.81
Chloride tech., cyl., works		.20	.22
dms., works	lb	.18	.20
tanks, works	lb	.10	—
Cinnamate cns	lb.	3.35	3.45
Ethyl ether, absolute, ACS, dms	lb.	.27	—
anesthesia USP hospitals, 1-lb. cns	lb	1.01	—
½ lb cns	lb	1.11	—
¼ lb cns	lb	1.21	—
Indust., dms., c.l., dlvd	lb.	.12½	—
l.c.l., dlvd E	lb.	.13½	—
tanks dlvd E	lb	.10	—
Gallate, dms., 100 to 2,000-lb. lots	lb	3.90	4.40
Iodide, cbys., works	lb.	3.30	—

Like a claw, Dow chelating agents firmly grasp and hold metal ions in solution, preventing them from undergoing the usual chemical reactions. But why so many Versene products? Are they effective on all metallic ions? We hope this continued discussion provides the answers, and further clarifies what chelates will do—and won't do.

DOW

The Chemistry of Chelation: Part III

Specific agents for specific conditions · Caustic solutions
Changing solutions · Industry responds

In all, Dow offers 15 commercially available chelation products. These are grouped in the Versene®, Versenol®, and iron specialty (Versene Fe-3 Specific®, Versene T®, Versene S) series. The Versene and Versenol series were discussed in Part II of this advertisement. When used in solution, the Versene products inactivate practically any polyvalent metallic ion they contact. They accomplish this by actually forming a new compound in which the metal ion becomes a member of a stable inner ring structure in the molecule, so that no reversion or breakdown can occur. However, no one chelating agent can complex all metal ions under all conditions. One of the major considerations determining which chelating agent to use is pH. To illustrate, let's look at iron-containing systems, among the most troublesome for chemical processors.

SPECIFIC AGENTS FOR SPECIFIC CONDITIONS

The first amino acid type chelate made commercially available was Versene, the tetrasodium salt of EDTA*. It is the most versatile member of the series for it ties up most polyvalent metal ions throughout the pH range—with this notable exception: It is excellent for complexing iron in the acid range only. For economy above pH 7, we must look to a later development, Versene Fe-3 Specific.

The most effective and efficient agent known for complexing iron in the mildly alkaline pH range, Versene Fe-3 Specific also chelates copper, nickel, and cobalt—but has no effect on calcium, magnesium or other common non-transition metal ions. Where calcium and magnesium along with iron cause difficulty in alkaline solutions, a blend of Versene and Versene Fe-3 Specific is the answer. This mixture, called Versene Fe-3, complexes all of these troublesome ions. Its Versene Fe-3 Specific content is sufficient so as to automatically take care of the quantity of iron normally encountered in hard water.

Versene Fe-3 is also considered an important adjunct to the polymerization of synthetic rubber. It controls the concentration of the iron ions catalyzing the reaction, thus insuring a more-uniform, higher-quality end product.

CAUSTIC SOLUTIONS

For chelating iron in caustic solution, another agent enters the picture—Versene T. This material ties up iron in a wide range of caustic solution concentrations. It also complexes calcium, magnesium, nickel, cobalt, and other metal ions—throughout the normal pH range as well as in caustic solutions. In the presence of a suitable reducing agent, Versene T functions effectively as a rust remover—and without the drawbacks of acid cleaners. Versene T thus finds widespread use in boiler and heat exchanger cleaning, textile processing, etc.

Another effective chelating agent that is selective for iron in the free caustic pH range is Versene S. Since it will not chelate alkaline earth ions, Versene S is especially suitable for use in silicate-lined textile processing kiers.

CHANGING SOLUTIONS

In special instances where a processing solution is strongly alkaline at first, then changes to neutral or to acidic, iron can be controlled with a mixture of Versene T and Versene Fe-3 Specific. In this combination, the Versene T component complexes the iron when the solution is caustic. As the pH drops, Versene Fe-3 Specific takes over.

INDUSTRY RESPONDS

Every day, Dow chelates are finding new and expanding usage —in textile manufacturing and rubber processing, in soaps, synthetic detergents, cosmetics, and pharmaceuticals. Their ability to control ionic concentrations, to eliminate product breakdown, to smooth out production and save money, has brought enthusiastic response from industry. That they are solving a multitude of processing problems is true. But chelates are no cure-all. To uncover their profitable uses, we will help in any way we can. Write us on your company letterhead for application data and technical assistance. Technical Service and Development, Department SC 913P-3 THE DOW CHEMICAL COMPANY, Midland, Michigan.

*Ethylenediaminetetraacetic acid

THE NEXT TOPIC IN THIS SERIES

PART IV *October* — Applications in specific industries (formulation of alkaline cleansers—stabilization of hydrogen peroxide and kier boiling in textile processing—uniform control of trace metal catalysts in polymerization of synthetic rubber—other industrial applications).

YOU CAN DEPEND ON DOW

Ethyl methacrylate, dms., c.l., and less than truckload, works, frt. equald	lb.	.51½	.53
Morphine hydrochloride, USP, bots.	oz.	11.85	—
Nitrite (see Nitrous ether).			
Oenanthate, dms.	lb	1.00	1.50
Oleate, dms., l.c.l., works	lb	No prices	
Oxalate (see Diethyl oxalate).			
Silicate dist (see Tetraethyl orthosilicate).			
40% available SiO_2, dms., c.l., dlvd	lb.	.44½	—
l.c.l., dlvd	lb.	.45½	—
tanks, dlvd	lb.	.42	—
Ethylethanolamines mixed, dms., c.l., dlvd E	lb.	43½	—
l.c.l., dlvd E	lb.	44½	—
tanks, dlvd E	lb	41½	—
N-Etnyl-a-naphthylamine dms. works	lb	1.02	—
N-Ethyl-o-toluidide bbls.	lb.	.88	—
Ethylamine (see Mono, Di- or Tri-)			
N-Ethylaniline dms. c.l. frt. alld.	lb.	.57	—
l.c.l., frt. alld	lb.	.58	—
tanks, frt. alld	lb.	.55	—
Ethylbenzene 99% dms. c.l., or t.l. frt equald	lb	.17	—
t.t.l. same basis	lb.	.18	—
tanks, same basis	lb	.15	—
2-Ethylbutyl alcohol, dms., c.l., works	lb.	.30	—
Dms., l.c.l., works	lb.	.30¾	—
Tanks, works	lb.	.28	—
2-Ethyl hexoic acid, dms., c.l., dlvd.	lb.	.37	—
Dms., l.c.l., dlvd.	lb.	.38	—
Tanks dlvd.	lb.	.34½	—
2-Ethylhexyl alcohol, dms., c.l., dlvd. E	lb.	.24¼	—
Dms., l.c.l., same basis	lb.	.25¼	—
Tanks, same basis	lb.	.21¾	—
Ethylene dichloride dms. c.l. dlvd.	lb.	.11½	—
l.c.l. same basis	lb.	.12½	—
tanks, same basis	lb.	.09	—
Ethylene dichloride prices W. of Rockies 1c. per lb. higher.			
Glycol, indust. dms. c.l. dlvd. E	lb.	.16	—
l.c.l. same basis	lb.	.17	—
tanks, same basis	lb.	.13½	—
Monobutyl ether dms., c.l., dlvd. E	lb.	.22	—
l.c.l. dlvd E	lb.	.23	—
tanks, dlvd. E	lb.	.19½	—
Monoethyl ether dms., c.l., dlvd. E	lb.	.21	—
l.c.l. dlvd. E	lb.	.22	—
tanks, dlvd E	lb.	.18½	—
Acetate, dms., l.c., dlvd. E.	lb.	.19½	—
l.c.l. dlvd E	lb.	.20½	—
tanks, dlvd. E	lb.	.17	—
Monomethyl ether dms., c.l., dlvd. E	lb.	.21	—
l.c.l., dlvd. E	lb.	.22	—
tanks, dlvd. E	lb.	.18½	—
Acetate, dms., l.c., dlvd. E.	lb.	.29	—
l.c.l. dlvd E	lb.	.29¾	—
tanks, dlvd. E	lb	.27	—
Monostearate triple pressed, dms	lb.	.33	.35
Oxide, dms., c.l., dlvd E	lb.	.21½	—
l.c.l. dlvd. E	lb.	.24½	—
tanks dlvd E	lb.	.15½	—
Trichloride (see Trichloroethane).			
Ethylenediamine 85-88%, dms., c.l., dlvd. E., 100% basis	lb.	.42	—
l.c.l., dlvd. E., 100% basis	lb.	.43	—
tanks, dlvd. E., 100% basis	lb.	.40	—
Ethylvanillin, cns., 25-lb. lots	lb.	7.65	—
Eucalyptol, USP cns., dms	lb.	1.25	1.40
Eucalyptus oil, NF, rectified, 70-80% dms	lb.	.62	—
rectified, 80-90%, dms.	lb.	.72	—
Eugenol, USP bots	lb.	2.25	2.60
Euphorbia herb, bls	lb.	.15	.17

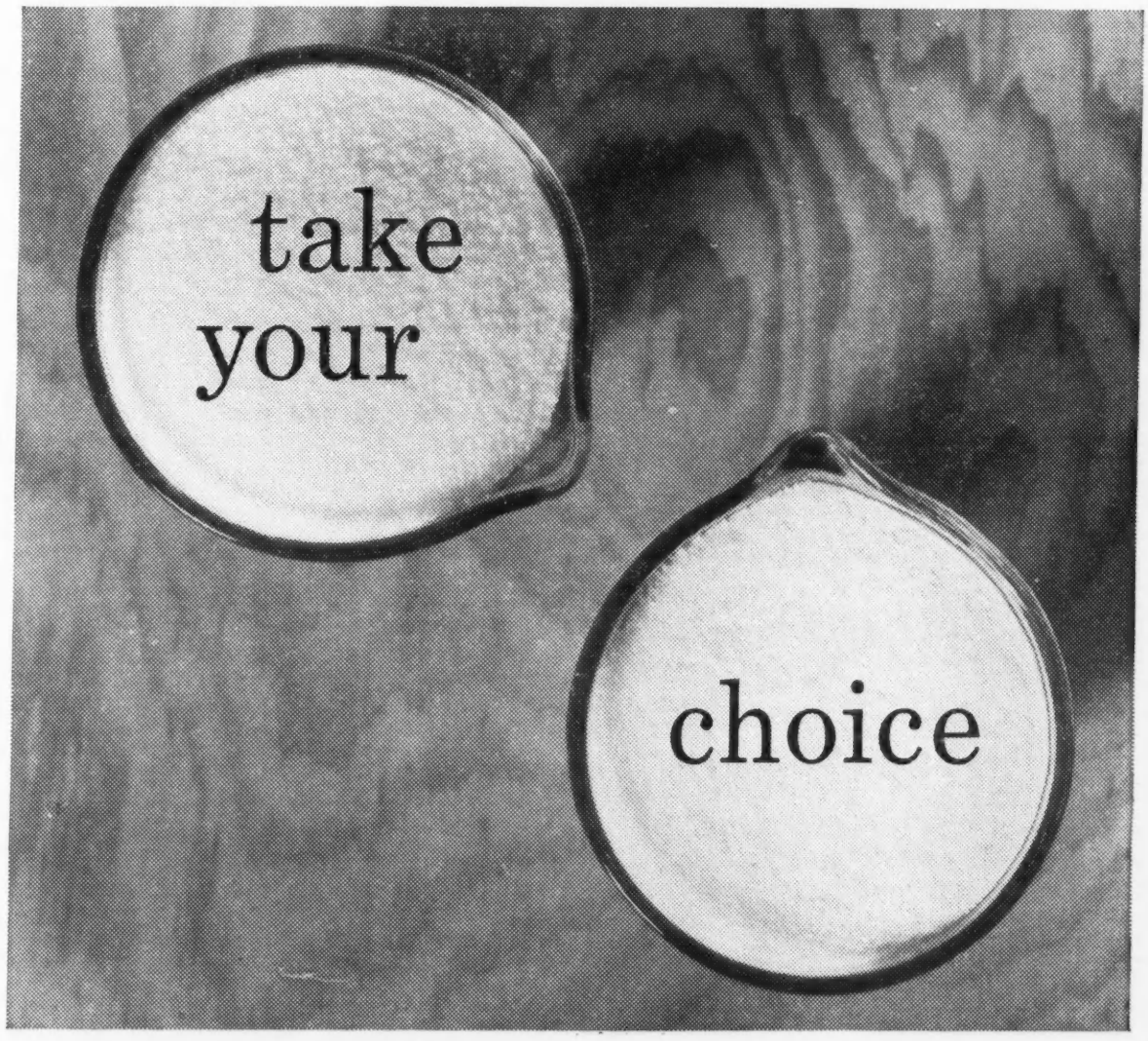
F

F acid, crude, paste, bbls., works.	lb.	2.10	—
Feldspar, 140-200 mesh, bulk, c.l., works	ton.	19.50	—
Feldspar in bags $3 per ton higher.			
Fennel oil, sweet, USP, cns.	lb.	2.85	—
Fennel seed, Argentine, bgs.	lb.	.13½	—
Czech, medium, bgs.	lb.	.09	—
Indian, light, bgs.	lb.	.15½	—
Roumanian, bgs	lb.	.09	—
Fenugreek seed, Indian, bgs	lb.	.08½	.09
Moroccan, bgs	lb.	.08½	.09
Ferric acetate, liq., 28°, bbls., c.l., works	lb.	.09	—
l.c.l., works	lb.	.09¾	—
soln., USP IX, cbys.	lb.	.16	—
dns.	lb.	.17	—
Chloride, anhyd., tech., dms., c.l., works	100 lbs.	7.00	—
l.c.l., works	100 lbs.	7.85	—
indust., cryst. bbls., c.l., works.	100 lbs.	5.25	6.75
t.c.l. works	100 lbs.	5.75	7.25
42° Be., photo grade, cbys., c.l., works	100 lbs.	7.25	8.25
sewage grade, tanks, frt. equald. 100% basis.	100 lbs.	3.75	—
USP cryst. dms. works	lb	.07½	.09
Citrate, gran., dms	lb.	.86	—
Hypophosphite, NF dms	lb.	3.45	—
Naphthenate, liq. 6% Fe, dms., frt. alld	lb.	.25¾	—
Oxalate gran. dms	lb.	.85	.87
Oxides (see oxides under Black, Brown, Red, and Yellow.)			
Phosphate, NF soluble, gran., pearls cs	lb.	.64	.65
Pyrophosphate, NF VII, soluble, powd., gran., pearls, dms., 10,000 lb lots	lb.	.40½	—
Resinate, 6¾% Fe., dms., frt. alld.	lb.	.29½	—
Stearate, dms., c.l., frt. alld.	lb.	.39	—
l.c.l., frt. alld	lb.	.40	.44
Sulfate, partly hydrated, bgs., c.l., works	ton.	35.25	—
l.c.l., works	ton.	36.25	42.25
bulk, c.l., works	ton.	33.25	—
Ferric-ammonium citrate, brown, pearls, NF gran., dms	lb.	.65	.68
green pearls, USP XII, gran., dms	lb.	.66	.69
Oxalate, fine gran., dms	lb.	.25½	.28½
Ferric-potassium oxalate, fine gran., dms	lb.	.30½	.33½
Ferric-sodium oxalate, fine gran., dms	lb.	.25½	.28½
Ferrous gluconate, NF, dms	lb.	.94	—
Sulfate, gran., bgs., c.l., works.	ton.	34.50	—
l.c.l., dlvd. Metropolitan area	100 lbs.	3.25	4.25
bbls., c.l., works	ton.	40.00	—
bulk, c.l., works	ton.	27.00	—
USP, cryst., bbls., dms	lb.	.09½	.10
Fir, balsam, Canada, cns	gal.	32.00	35.00
Oregon, bbls	gal.	3.75	4.00
Fir oil, Canada, cns.	lb.	4.75	—
Fish oil, refd., alkali, dms.	lb.	.1450	.1500
Kettle-bodied, dms.	lb.	.1680	.1730
Light-pressed, dms.	lb.	.1300	.1350
tanks	lb.	.1150	—
Fishliver oil, crude, for feeds or concentrating, 4,000 to 12,000 A units per gram, dms 1,000,000 units.		.08	.09
10,000 to 20,000 A units per gram, dms., 1,000,000 units.		.09	.10
25,000 to 35,000 A units per gram, dms., 1,000,000 units.		.09	.10
40,000 to 55,000 A units per gram, dms., 1,000,000 units.		.10½	.11
100,000 A units per gram., dms., 1,000,000 units.		.14	—
200,000 A units per gram., dms., 1,000,000 units.		.15½	—
500,000 A units per gram., dms., 1,000,000 units.		.16	—
Prices above are based on the USP XIV method of conversion, Morton Stubbs Corrected E x 1900.			
Fishmeal, dom. menhaden, 60% protein grd. bgs., Chesapeake Bay area	ton.	140.00	—
scrap, same basis	ton.	137.00	—
Fleaseed (see Psyllium seed)			
Folic acid, bots., fib. cns., kilo-lots or more	gram.	1.40	—
Formaldehyde 37% (inhibited, 7 to 8% methanol) USP, dms., c.l., dlvd	lb.	.0715	—
tanks, dlvd	lb.	.0450	—
(12 to 15% methanol), USP, dms., c.l., dlvd	lb.	.0740	—
tanks, dlvd	lb.	.0475	—
(uninhibited, methanol-free), tanks, dlvd	lb.	.0420	—
Formic acid, 85%, cbys., c.l., works.	lb.	.1570	—
cbys., l.c.l., works	lb.	.1620	.1720
90%, cbys., c.l., works	lb.	.1625	—
cbys., l.c.l., works	lb.	.1675	.1775
Fringetree bark, bls	lb	60	.61
Fullers' earth, bgs. c.l. (ll mines,	ton.	19.00	—
powd., insecticide grade, dried, bgs. c.l. Ga or Fla. mines	ton.	17.50	—
calcined bgs. c.l., same basis	ton.	20.00	21.75
oil-bleaching grade, 100-mesh, bgs., c.l., same basis	ton.	16.30	17.00
200-mesh bgs. c.l., same basis	ton.	17.50	18.00
spent bgs. c.l. shipt point	ton.	4.50	5.00
Fumaric acid, tech., bgs., dms., c.l., frt. alld. E	lb.	.27	—
bgs., l.c.l., same basis	lb.	.28	—
Prices of fumaric acid 1½c. per lb. higher west of Denver.			
Furfural dms. c.l. works	lb	.13	—
l.c.l. works	lb.	.14	—
tanks, dlvd E	lb.	.12	—
dlvd W	lb.	.13	—
Furfuryl alcohol, cns., works	lb.	.29	—
Dms., c.l., Memphis Tenn	lb.	.20	—
Dms., c.l., Newark, N. J	lb.	.21½	—
Dms., l.c.l., Memphis, Tenn	lb.	.21	—
Dms., l.c.l., Newark, N. J	lb.	.22½	—
Tanks, Memphis, Tenn	lb.	.184	—
Fusel oil, refd., dms. c.l. dlvd	lb	18	—
l.c.l. dlvd	lb	19	—
tanks, dlvd	lb	15½	—
Fustic extract, crvst. No 1, bbls. l.c.l	lb	47½	—
No 2 bbls, l.c.l	lb	45½	—
No 3 bbls., l.c.l	lb	43½	—
liq., No 1, bbls, l.c.l	lb	22½	—
No 2 bbls l.c.l	lb	21½	—
No 3 bbls, l.c.l	lb	19	—
solid No 1 bxs, l.c.l	lb	45	—

G

G salt, bbls., frt. alld., 100% basis.	lb.	.73	—
Gallic acid, NF, VII bbls., 1,000-lb. lots	lb.	2.00	—
bbls., smaller lots	lb.	2.02	2.22
Tech., bbls., 1,000-lb lots	lb.	1.78	—
bbls., smaller lots	lb.	1.80	2.00
Gamma acid, dry grd., bbls., frt. alld.	lb.	1.50	—
Paste, bbls., frt. alld	lb.	1.45	—
Gammapicoline (see g-Picoline)			
Garlic oil, pure, bots	oz.	4.25	5.00
Gaultheria oil (see Wintergreen oil).			
Gelatin, edible pure (pork skin), 75 Bloom test, bbls., c.l.	lb.	.53	—
150 Bloom test, bbl., c.l.	lb.	.64	—
200 Bloom test, bbls., c.l.	lb.	70	—
225 Bloom test, bbls., c.l.	lb.	73	—
275 Bloom test, bbl., c.l.	lb.	.81	—

Fine Granular...or Powder Form?



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Gelsemium Root—Hydrochloric Acid

Gelsemium root, bls	lb.	.26	—
Gentian root, bls	lb.	.23	—
grd., bbls., bxs	lb.	.27	—
powd. bbls. bxs	lb	.27	—
Geraniol, extra, cns., dms	lb.	3.40	—
standard, cns., dms	lb.	3.30	3.60
Geranium oil, Algerian, cns	lb.	13.50	14.50
Bourbon, cns	lb.	15.00	—
Turkish (see Palmarosa oil).			
Geranyl acetate, cns	lb.	3.10	—
Ginger oil, dist., bots	lb.	24.00	—
Ginger oleoresin NF from African root, bots	lb	4.00	7.75
from Jamaican root, bots	lb	6.00	10.25
Ginger root, African, bls	lb.	.33	—
Cochin, bgs	lb.	.26½	—
Jamaican, No. 2, bgs	lb.	.76	—
No 3 bgs	lb.	.75	—
Nigerian, split, bgs	lb.	.28	—
Glauber's salt anhyd (see Sodium sulfate)			
Gluconic acid, tech., 50%, bots., works	lb.	.25	—
non-ret. dms., c.l., works	lb.	.15½	—
dms., 1-dm. lots, works	lb.	.16	—
Glue, bone, extracted, dry bone, 86 jellygrams bgs., c.l., dlvd	lb.	.15	—
104 jellygrams same basis	lb.	.17	—
131 jellygrams same basis	lb.	.18	—
Glue, bone, extracted, dry bone, 191 jellygrams same basis	lb	.21	—
222 jellygrams same basis	lb	.22	—
Glue, bone, green, 40 jellygrams, bgs., c.l., dlvd	lb.	.13½	—
85 jellygrams, same basis	lb.	.13¾	—
86 jellygrams, same basis	lb.	.14	—
115 jellygrams same basis	lb.	.14½	—
135 jellygrams, same basis	lb.	.15	—
164 jellygrams same basis	lb.	.16	—
Glue, bone, green, 180 jellygrams, same basis	lb.	.17	—
200 jellygrams, same basis	lb.	.18½	—
Bone glue, l.c.l. prices 1c. higher.			
Glue, hide, 70-94 jellygrams, bgs., c.l., dlvd	lb.	.15	—
95-121, bgs., c.l., dlvd	lb.	.16	—
122-149, bgs., c.l., dlvd	lb.	.18½	—
150-177, bgs., c.l., dlvd	lb.	.21	—
178-206, bgs., c.l., dlvd	lb.	.23½	—
207-236, bgs., c.l., dlvd	lb.	.26	—
237-266, bgs., c.l., dlvd	lb.	.28	—
267-298, bgs., c.l., dlvd	lb.	.30	—
299-330, bgs., c.l., dlvd	lb.	.32	—
331-362 bgs, c.l., dlvd	lb.	.34	—
363-394, bgs., c.l., dlvd	lb.	.36	—
395-427, bgs., c.l., dlvd	lb.	.38	—
428-460, bgs., c.l., dlvd	lb.	.40	—
461-494, bgs., c.l., dlvd	lb.	.42	—
495-529, bgs., c.l., dlvd	lb.	.43	—
Hide glue l.c.l. prices 1c. higher.			
l-Glutamic acid, 99½%, fib. dms., 100-lb. lots, frt. alld	lb.	2.00	—
fib. dms., 25-lb. lots., frt. alld	lb.	2.05	—
l-Glutamine, bots.	gram.	.65	—
Glycerine, nat., crude, saponification, 88%, to refineries, tanks	lb.	.16½	.18¼
soaplye, 80%, tanks	lb.	.15	.16¾
refd., CP, USP 99%, dms., c.l., dlvd	lb.	.29¾	—
l.c.l., dlvd	lb.	.29⅞	—
tanks, dlvd	lb.	.27⅛	—
96%, dms., c.l., dlvd	lb.	.28½	—
l.c.l., dlvd	lb.	.29	—
tanks, dlvd	lb.	.27	—
high gravity, dms., c.l., dlvd.	lb.	.29¼	—
l.c.l., dvid	lb.	.29¾	—
tanks, dlvd	lb.	.27¾	—
yellow dist., c.l.	lb.	.28½	—
l.c.l., dlvd.	lb.	.29	—
Glycerine, syn., dms., c.l., dlvd	lb.	.29½	—
l.c.l., dlvd.	lb.	.30	—
tanks, dlvd	lb.	.28	—
Glycine (see Acid aminoacetic).			
Glycerol (see Glycerine).			
Glycolic acid (see Hydroxyacetic acid).			
Glyoxal, 30%, dms., c.l., works	lb.	.20½	—
l.c.l., works	lb.	.21¼	—
tanks, works	lb.	.18	—
Golden seal root, NF, tested, bls.	lb.	3.85	—
Grapefruit oil, dms	lb.	1.60	—
Graphite, amorph., powd., bgs., fib. dms. ex whse	lb.	.06	.09½
crystalline, 88-90%, powd., bgs., fib. dms., ex whse	lb.	.19	.21½
90-92% powd., bgs., fib. dms., ex whse	lb.	.21	.24½
95-97%, powd., bgs., fib. dms., ex whse	lb.	.29	.31½
flake, No. 1, 90-95%, bgs., fib. dms., ex whse	lb.	.29	.31
No. 2, 90-95%, bgs., fib. dms., ex whse	lb.	.29	.31
Grease, white, choice, all hog tanks, dlvd	lb.	.08¾	.08⅞
yellow, tanks, dlvd	lb.	.08¾	.08⅞
Grease oil, No. 1, dms., c.l.	lb.	.15¾	—
dms., l.c.l.	lb.	.16¾	.18¾
Extra winter, strained dms., c.l.	lb.	.18¼	—
dms., l.c.l.	lb.	.19¼	.21¼
Prime, burning, dms., c.l.	lb.	.19¾	—
dms., l.c.l.	lb.	.20¾	.22¾

Green Pigments

Green pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green.

Grindelia robusta herb, bls	lb.	.45	—
Guaiacol, NF, cryst., dms., tins	lb	2.10	2.15
liq., cbys., dms	lb	2.30	2.40
Carbonate, NF VII, dms	lb	3.40	3.45
Guar gum, food grade, bgs	lb.	.50	—
Tech. grade, bgs	lb.	.40	—
Guaiacwood oil, cns	lb.	1.60	—

Gums

Gum quotations, formerly grouped under one heading, are now listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum.

Gypsum, plaster of paris, 100-lb. paper, bgs trucks, dlvd New York	ton.	20.30	—
Terra alba, don. paper bgs., same basis	ton	20.00	—
works, New York	ton.	17.00	—
imp., English, 100-lb. paper bgs., ex dock, New York	ton.	55.00	—
ex warehouse	ton	60.00	62.00

H

H acid, dry, bbls., c.l., frt. alld., 100% basis	lb.	1.00	—
bbls., l.c.l., same basis	lb.	1.02	—
Hansa yellow, 10 G, bbls., same basis as yellow, chrome	lb.	2.35	—
G pigment, bbls	lb.	2.20	—
Hawthorn berries, bgs	lb.	.21	—
Hellotropin, 100-lb. lots, dms	lb	3.00	3.25
Hellebore root, dom. green bls	lb	.70	.75
Helonias root, bls	lb	1.75	2.00
Hematine extract, cryst., No. 1, bbls., l.c.l	lb.	.47	—
No. 2, bbls., l.c.l	lb	.43	—
No. 3, bbls., l.c.l	lb	.41	—
No 4 bbls., l.c.l	lb	.39	—
No 5, bbls., l.c.l	lb.	.37	—
paste, No 1 bbls., l.c.l	lb	.20½	—
Hemlock oil, cns	lb.	2.10	2.50
Henbane leaves, bls	lb	.35	.40
Heptane, indust. tanks, Bayonne, N. J.	gal.	.20	—
Baytown, Tex.	gal.	.16¼	—
Borger, Tex.	gal.	.16¼	—
Hesperidin, purif. 25 lb. lots, f.o.b. works	lb	8.95	—
Methylchalcone, bots. 50-lb. lots, works	lb	22.50	—
5-lb. lots, works	lb	23.00	—
1-lb. lots, work	lb	23.50	—
Hexachlorophene, dms	lb.	1.94	—
Hexalin (see Cyclohexanol).			
Hexamethylenetetramine, tech., bgs., 20,000-lb. lots or more, Perth Amboy or N.Y.C.	lb.	.233	—
1,000-19,999-lb. lots, same basis	lb.	.243	—
smaller lots, same basis	lb.	.253	—
fib. dms. 1,000-lb. lots or more, same basis	lb.	.250	—
smaller lots, same basis	lb.	.253	—
USP, bgs. 500 lbs. or more, f.o.b. Fords, N. J., dlvd. N. Y. C. and Philadelphia	lb.	.42½	—
smaller lots, same basis	lb.	.43½	48¼
Hexane, indust. tanks, Bayonne, N. J.	gal.	.20	—
Baytown, Tex.	gal.	.17	—
Borger, Tex.	gal.	.17	—
1-Hexanol, dms., c.l., works	lb.	.35	—
l.c.l. works	lb.	.35¾	—
tanks, works	lb	.33	—
Hexyl cinnamic aldehyde, dms	lb	4.00	7.50
Salicylate, dms	lb	1.75	—
Hexylene glycol dms., c.l., dlvd	lb.	.17	—
l.c.l. dlvd	lb.	.18	—
tanks, dlvd	lb.	.14½	—
α-Hexyl methacrylate, dms., less than truckload, works	lb	.71	—
Hexylresorcinol, USP, dms., 50-lb. lots or more, dlvd	lb.	14.00	—
smaller lots, dlvd	lb.	14.50	—
Homatropine hydrobromide, USP bots	oz	5.50	—
Methylbromide, USP, bots	oz	3.90	—
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago	unit-ton	6.25	—
Horehound herb, bls	lb	.16	.19
Hydrastis (see Goldenseal).			
Hydrazine free base, ret. dms., works	lb	No stocks.	
Hydrate, 85%, ret. dms., works	lb	1.35	1.55
100%, ret dms., works	lb	1.60	1.90
Hydriodic acid, 1.50 s.g., cbys	lb.	2.94	—
1.70 s.g., cbys	lb.	3.23	—
Hydroabietyl alcohol, tech., solid, zone 1, dms., c.l., dlvd	lb.	.29¼	—
dms., l.c.l., dlvd	lb.	.29⅜	.30¼
tanks, dlvd	lb.	.27¼	—

Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo. and the western part of Texas.

Hydrobromic acid, medicinal, 48%, cbys., dlvd. E	lb.	.37	.43
Hydrochloric acid, anhyd. (see Hydrogen chloride).			
Hydrochloric acid, 18°, cbys., c.l., works	100 lbs.	2.50	—
cbys., l.c.l., dlvd. metropolitan area	100 lbs.	2.90	3.05
tanks, works, frt. equald	ton.	28.00	—
20°, cbys., c.l., works	100 lbs.	2.75	—
cbys., l.c.l., dlvd. metropolitan area	100 lbs.	3.15	—
tanks, works, frt. equald	ton.	30.00	—
22°, cbys., c.l., works	100 lbs.	3.25	—
cbys., l.c.l., dlvd. metropolitan area	100 lbs.	3.65	—
tanks, works, frt. equald	ton.	35.00	—

Amine Price Cut Again

Before April 1951 • April 1951 • August 1951 • December 1955 • March 1957

PRICE PER POUND OF **PRIMENE 81-R** IN TANK CAR QUANTITIES

There is now another reason for using PRIMENE 81-R, a t-alkyl primary amine of approximately 12 carbons, as an oil additive and as an intermediate in the preparation of bactericides, fungicides, corrosion inhibitors, anti-oxidants, surface-active agents and other products. On March 1 the price of PRIMENE 81-R was reduced from 35¢ to 30¢ per pound in tank car quantities—one more step in the downward price trend of this amine.

Other Rohm & Haas t-alkylamines—PRIMENE JM-T, tertiary-butylamine and tertiary-octylamine—have been reduced similarly in the past. As the foremost producer of these t-alkylamines and the first to offer them in large commercial quantities, Rohm & Haas is able to couple low cost with high quality. Write to Dept. SP for a 36-page booklet describing the properties of these t-alkylamines and the steric control which gives them unique reactivity.

Chemicals for Industry

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WASHINGTON SQUARE, PHILADELPHIA 5, PA.

Representatives in principal foreign countries

PRIMENE *is a trade-mark, Reg. U.S. Pat. Off. and in principal foreign countries.*

Hydrochloric acid, CP, USP, consumers, cbys., extra, c.l., works. lb. .15¾- —
cbys., l.c.l., same basis lb. .17¼- .17¾
5-pint bots., extra, cs., c.l., same basis lb. .20¾- —
5-pint bots., extra, cs., l.c.l., same basis lb. .22¼- .23¼
Hydrocortisone acetate bulk bots. up to 500 gms gm. 4.75 - —
Alcohol, bulk, bots. up to 500 gms gm. 4.75 - —
Hydrocyanic acid, cyls., c.l., dlvd. lb. .70 - —
Cyls., l.c.l., same basis lb. .75 - .90
Dilute, NF, 2%, 5-lb. bots. lb. .40 - —
Hydrofluoric acid, anhyd. (see Hydrogen fluoride).
Hydrofluoric acid, aqueous, 70%, 55-gal. dms., c.l., t.l., dlvd. 100 lbs. 19.25 - —
55-gal. dms., l.c.l., l.t.l., dlvd. 100 lbs. 20.75 - —
20-gal. dms., c.l., t.l., dlvd. 100 lbs. 21.00 - —
20-gal. dms., l.c.l., l.t.l., dlvd. 100 lbs. 22.50 - —
tanks, works, frt. equald. 100 lbs. 15.50 - —

Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington, and Wyoming. In those states add $2.70 per cwt. for drum delivery.

Hydrofluosilicic acid, dms., works, 30% basis lb. .06 - —
Hydrofuramide, dms. fib ctns., works lb. .30 .40
Hydrogen chloride, anhyd. 50-lb. cyls., c.l., works lb. .45 —
t.c.l., works lb. .55 .60
Fluoride anhyd. cyls., dlvd. E lb. .30½- .32½
dlvd W lb .39 —
tanks, works lb. .21 —
Peroxide, USP bbls., dlvd lb. .03¾- .05
35%, dms., c.l., dlvd lb. .202 —
l.c.l., dlvd lb. .211 —
tanks, dlvd lb- 1800- —
Hydroquinone, pnoto grade, bbls., dms lb. 1.03 1.06
tech., dms., c.l., dlvd lb. .82½- —
l.c.l., dlvd lb. .84½- —
Hydroxyacetic acid, tech., 70%, non-ret. bbls., Phila., 100% basis lb. .136 - —
tanks, Belle, W. Va., 100% basis lb. .095 - —
Hydroxycitronellal, cns lb 6.00 7.45
Hyoscine salts (see Scopolamine)
Hyoscyamine hydrobromide, bots. oz. 6.00 - 7.00
Sulfate, bots oz. 6.75 - 7.25
Hypernic extract cryst. No 2, bbls., l.c.l lb. .52 - —
liq., No 1, bbls., l.c.l lb. .35 - —
No 2, bbls., l.c.l lb .27 - —
Hypophosphorous acid, purif., 50%, cbys. lb. 1.30 - 1.32
USP, cbys. lb. .88 - —

I

Ichthammol, NF, jars lb. .75 - 2.57
Indigo (see Dyes, coaltar, 1171 indigo, syn.).
Indole, CP, bots lb. 16.50 -21.00
Inositol bots., dlvd lb 5.00 —
dms., dlvd lb 4.50 4.75
Insect flowers (see Pyrethrum).
Iodine, crude, kgs lb. 1.10 - —
resub., USP, dms., jars lb 2.30 2.32
Iodochlorohydroxyquinolin, USP, dms lb. 5.90 —
Iodoform, NF, dms., kgs lb 4.90 5.00
a-Ionone, cns lb. 5.25 5.40
b-Ionone, cns lb. 5.40 5.70
Ipecac root, bgs., whole lb. 7.50 - —
powd., bbls., bxs lb. 7.85 - —
Irish moss, bleached, prime, bls lb. .28 - .34
Iron blue, reg., bbls., c.l., dlvd., N. of Tenn. and N. C., E. of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis lb. .52 - —
bbls., l.c.l., ton lots, same basis lb. .53 - —
bbls., smaller lots, same basis lb. .54 - —
Alkali-resisting, bbls., c.l., same basis lb. .57 - —
bbls., l.c.l., ton lots, same basis. lb. .58 - —
bbls., smaller lots, same basis. lb. .59 - —

Iron blue dlvd. prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equald. with Chicago.

Iron compounds (see Ferric or Ferrous).
Iron oxide black, pure, bgs., c.l., works lb. .13¼- —
bgs., l.c.l., works lb. .13½- —
Iron oxide brown, pure, bgs., c.l., works lb. .14¼- —
bgs., l.c.l., works lb. .14½- —
Iron oxide hydrated yellow, pure, bgs., c.l., works lb. .11½- —
Iron oxide metallic brown, bgs., works lb. .04 - —
Iron oxide metallic red, bbls., c.l., works lb. .02½- —
Bbls., l.c.l., works lb. .02¾- —
Iron oxide Persian Gulf red, bgs., c.l., works lb. .07¾- —
Iron oxide red, dom., pure, bgs., Bethlehem, Easton, E. St. Louis, N. Y. lb. .12¾- —
Iron oxide red, nat., 75-85% ferric oxide, bgs., l.c.l., Bethlehem, Pa., Copley, O., Easton, Pa., bgs., c.l., works lb. .0675- —
Bgs., l.c.l., works lb. .08 - —
Iron oxide Spanish red, bbls., c.l., ex-dock lb. .05¾- —
Bbls., l.c.l., ex-dock lb. .06 - —
Bbls., l.c.l., ex whse., New York lb. .06½- —
bgs., l.c.l., works lb. .11¾- —
Iron oxide yellow, nat., French type, bgs., c.l., works lb. .06 - —
Peruvian type, bgs., l.c.l lb. .0205- .0345
type bgs., l.c.l. lb. .0205- .0345
Isoamyl alcohol, dms., c.l., works, frt. alld. E lb. .26 - —
Dms., l.c.l., same basis lb. .29 - —
Tanks, same basis lb. .25 - —
Isoborneol, cns lb 1.25 1.70
Isobornyl acetate, cns lb. .46 - .70
Formate, dms lb. .80 - —
Propionate, dms lb 1.15 - 1.45
Isobutyl acetate, perfume grade, cns lb. .75 1.00
solvent grade, dms., c.l., dlvd E. of Rockies lb. .14¾- —
l.c.l., same basis lb. .15¾- —
tanks, same basis lb. .12¼- —
Isobutyl alcohol, dms., c.l., dlvd. lb. .15½- —
Dms., l.c.l., dlvd. lb. .16½- —
Tanks, dlvd. lb. .13 - —

Isobutyraldehyde, CP, dms., c.l., dlvd. lb. .27¼- —
t.c.l., dlvd lb. .28½- —
tech., dms., c.l., dlvd lb. .21½- —
l.c.l., dlvd lb. .22½- —
tanks, dlvd lb. 19½- —
Isoeugenol, cns lb. 3.60 4.40
Isoniazid, powd., bulk, 25-kilo lots or more kilo. 23.00 -25.50
smaller lots kilo. 24.00 -26.00
Isonicotinic acid, 100-lb. fib. dms., works lb. 4.25 - —
Isonicotinic acid hydrazide (see Isoniazid).
Iso-octyl alcohol, dms., c.l., dlvd. E. lb. .23½- —
Dms., l.c.l., dlvd. E lb. .24½- —
Tanks, dlvd. E lb. .21 - —
Isopentane, coml. grade, tanks, f.o.b. Tex, refy gal. .15½- —
Isophorone, dms., c.l. works lb. .24½- —
l.c.l. works lb. .25¼- —
tanks, works lb. .22½- —
Isopropanol (see Alcohol, Isopropyl).
Isopropyl acetate, dms., c.l., dlvd. lb. .13½- —
l.c.l., same basis lb. .14½- —
tanks, same basis lb. .11 - —
Isopropyl alcohol, refd., 91%, dms., c.l., dlvd. gal. .53 - —
dms., l.c.l., dlvd. gal. .60 - —
tanks, dlvd. gal. .37 - —
95%, c.l., dms., dlvd. gal. .55 - —
dms., l.c.l., dlvd. gal. .62 - —
tanks, dlvd. gal. .39 - —
99%, dms., c.l., dlvd. gal. .57 - —
dms., l.c.l., dlvd. gal. .64 - —
tanks, dlvd gal. .41 - —
Benzene (see Cumene).
Ether, dms., c.l., dlvd lb. 07 - —
l.c.l. dlvd lb. 08 - —
tanks, dlvd lb. 05 - —
Isopropyl-N-(3-chlorophenyl) carbamate, (CIPC), 70% in xylol, dms., c.l., t.l. works lb. 70 - —
l.c.l. works lb. 714 - .814
Isopropylamine (see Mono Di, or Tri-).
Isopropyl-N-phenyl carbamate, 450-lb fib dms. c.l. t.l., works. lb. 75 —
t.c.l. works lb. .80 .90
Isoquinoline dms. works lb .65 1.25
Itaconic acid, tech., fib. dms., c.l., works lb. .44 - —
fib. dms., l.c.l., works lb. .45 - —
Purif., fib. dms., c.l., works lb. .54 - —
fib. dms., l.c.l., works lb. .55 - —

J

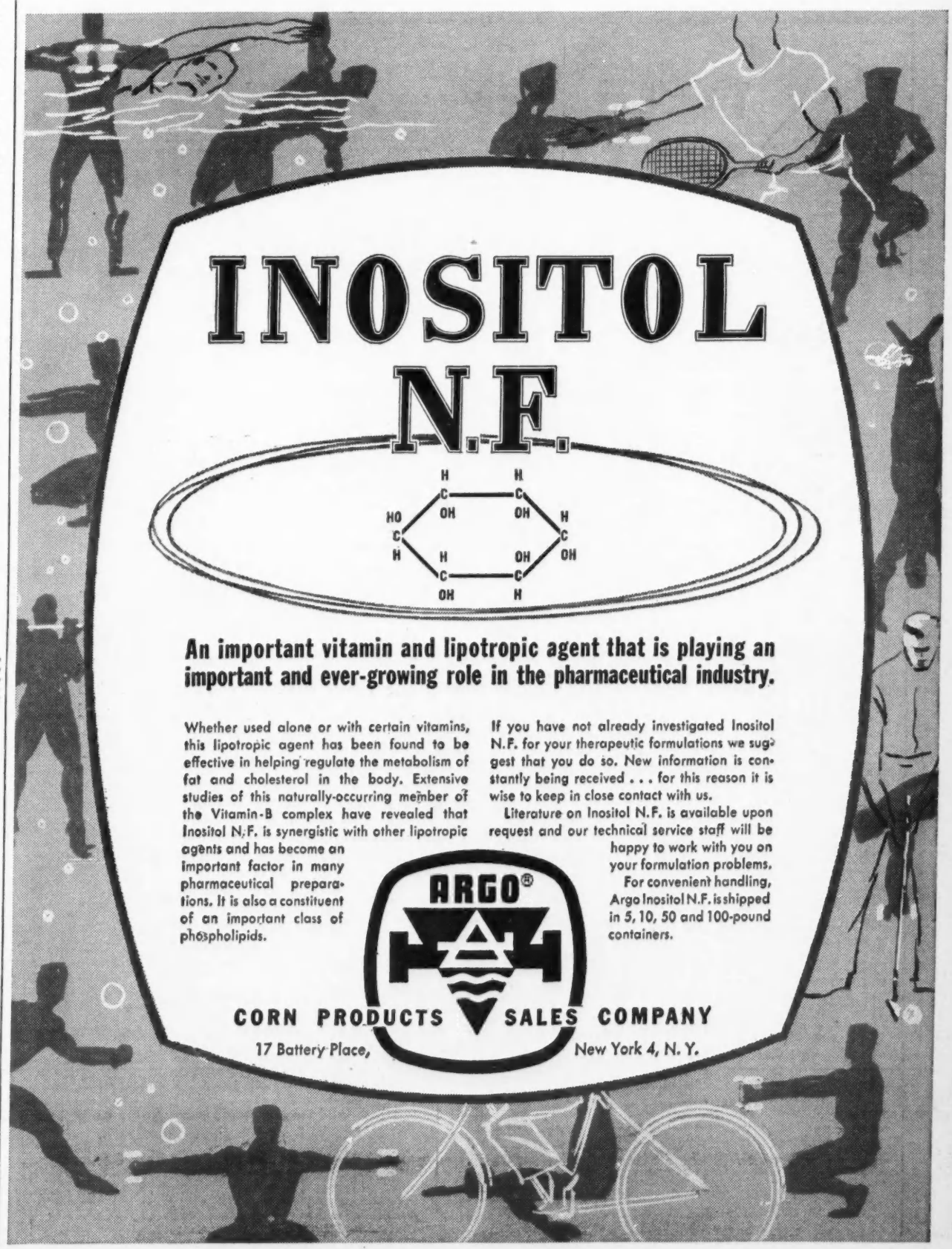
J acid, paste, bbls., works, 100% basis lb. 2.45 - —
Powd., bbls., same basis lb. 2.50 - 2.85
Jalap root, NF, bls lb NP —
powd., bbls., bxs lb. NP —
Japan wax, cs. lb. .43 - .44
Juniper berries, bgs lb 18 .20
Juniper berry oil, bots. lb. 2.75 - 4.00
Twice rectified, bots. lb. 3.60 - 7.00
Juniper tar, NF, dms. lb. .42 - .60
Juniper tar oil, NF (see Juniper tar).
Juniper wood oil, tech, cns. lb. .38 - .55

K

Kaolin (see also Clay China).
NF powd fib dms lb 10 12
colloidal fib dms lb 15½ 17½
Karaya gum, No. 1, NF, powd., bbls. lb. .50 - —
No. 2, powd., bbls. lb. .35 - .38
No. 3, powd., bbls. lb. .32 - .35
Koch acid, bbls., frt. alld., 100% basis lb. 1.00 - —
Kola nuts bgs lb 15 - —

L

L acid, bbls., works lb. 1.25 - —
Lacquer diluent, petroleum, 150-240° F., b.r., tanks, west coast, ex tax, Los Angeles, gal. .174 - —
tanks, east coast, N. J., N. Y. gal. .20 - —
Benzene type, tanks, group 3 gal. .15123- —
Toluene type, tanks, group 3 gal. .14375- —
Lactic acid, edible, 50%, c.l., dms., frt. equald. lb. .1780- —
20 or more dms., frt. equald. lb. .1830- —
5 to 19 dms., frt. equald. lb. .1880- —
1 to 4 dms., frt. equald. lb. .1930- —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N.F.
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HO
An important vitamin and lipotropic agent that is playing an important and ever-growing role in the pharmaceutical industry.
Whether used alone or with certain vitamins, this lipotropic agent has been found to be effective in helping regulate the metabolism of fat and cholesterol in the body. Extensive studies of this naturally-occurring member of the Vitamin-B complex have revealed that Inositol N.F. is synergistic with other lipotropic agents and has become an important factor in many pharmaceutical preparations. It is also a constituent of an important class of phospholipids.
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For convenient handling, Argo Inositol N.F. is shipped in 5, 10, 50 and 100-pound containers.
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Lactic acid, edible, 80%, c.l., dms., frt. equald..lb. .3030- —
20 or more dms., frt. equald..lb. .3080- —
5 to 19 dms., frt. equald....lb. .3130- —
1 to 4 dms., frt. equald.....lb. .3180- —
Edible lactic acid in barrels .0007 per lb. higher.
Plastic grade, 50%, bbls., 20 or more, works..lb. .23 - —
bbls., 1 to 19.....lb. .235 - —
80%, bbls., 5 or more.....lb. 385 - —
Lactic acid, tech., 22%, bbls., c.l., works..100 lbs. 6.30 - —
bbls., l.c.l., works....100 lbs. 6.70 - —
cbys., l.c.l., works..100 lbs.12.20 - —
44%, bbls., c.l., works..100 lbs.11.45 -11.95
bbls., l.c.l., works.....100 lbs.11.85 -12.35
USP, 85%, cyls. .....lb. .85 - .88
Lactose, edible, bgs., 23,000-lb. lots, frt. equald lb. .14 - —
6,000-lb. lots, frt. equald.... lb. .14½- —
2,000-lb. lots, frt. equald.... lb. .14¾- —
200-lb. lots, frt. equald.....lb. .15¼- —
Edible lactose in fib. dms., ½c. higher.
Lactose, fermentation grade, bgs., c.l., works..lb. .08½- —
USP 6b dms. 30,000-lb. lots, frt. equald lb. .21½- —
2,000-lb. lots, frt. equald lb. .22¼- —
200-1,800 lb. lots, frt. equald.lb. .22¾- —
USP lactose in bgs., ½c. to 1c. lower.

Ladyslipper root, bls.....lb. Nom. —
Lake C red toner, alizarine, bbls., works..lb. 1.20 - —
Lamp black, bgs., c.l., works .....lb. .16 - 45
Lanolin, cosmetic, dms., works lb. .27 - .29
USP, anhyd., dms., works.....lb. .24 - .26
hydrous, dms., works.....lb. .23 - .25
Lard, cash, dms., Chicago.....lb. .14⅜- —
Lard oil (see Grease oil).
Larkspur seed, bgs.....lb. .25 - —
Laurel leaf oil, dms., cns.....lb. 9.75 -12.50
Laurent's acid, bbls. .....lb. .60 - —
Lauric acid, 90%, dms.....lb. .36½- .38½
Lauryl alcohol, bots .....lb. 2.00 - 2.50
n-Lauryl methacrylate, dms., c.l. or t.l., works lb. .65½ —
Lavender flowers, medium, bls lb. 75 - .80
ord., bls.....lb. .25 - .40
select, bls..... lb. 90 - —
Lavender flower oil, perfume grade, USP, French, 35-37% ester, cns...lb. 5.50 - —
38-40% ester, cns.. .....lb. 7.50 - —
40-42% ester, cns.....lb. 9.00 - —
Spike, Spanish, cns.....lb. 2.60 - —
Lavandin oil, dms., cns.....lb. 2.55 - 2.95
Lead acetate, white, cryst., bbls. lb. .25½- —
gran., bbls .....lb. .26½- —
powd., bbls .....lb. .26½- —
NF, cryst., gran., powd.....lb. .36½- —
Arsenate, acid powder, dealers, 3-lb bgs or larger, c.l., frt alld on 96 lbs. or more lb. .27½- —

Lead arsenate, acid powder, dealers, 3-lb. bgs. or larger, l.c.l., frt. alld..lb. .28½- —
1-lb. bgs., c.l.....lb. .41½- —
l.c.l. .....lb. .42½- —
Blue, basic sulfate, bbls., c.l., shipt. point, frt. alld lb. .17¼- —
l.c.l., same basis .....lb. .18¼- —
Carbonate (see Lead, white, basic carbonate).
Chloride, dms .....lb. .45 - —
Iodide, NF, V jars .....lb. 3.82 - —
Linoleate fused, 26%% Pb, dms. lb. .33 - —
Lead, metal pigs, prime, N. Y....lb. .16 - —
St. Louis .....lb. .1380 - —
Monosilicate, bgs., c.l., works, frt. equald lb. .20 - —
t.c.l., same basis .....lb. .2075- —
Naphthenate, liq., 16% Pb., dms., dlvd lb. .17 - —
24% Pb. dms. dlvd .....lb. .21 - —
solid, 37% Pb., dms. dlvd ...lb. .27½- —
Nitrate, bbls.....lb. .23¾- —
Orthosilicate-silica gel, 50-60% PbO dms., works lb. .29¾- .34⅛
Peroxide tech. powd. bbls ...lb. .38¾- .40¼
Phthalate, dibasic dms. works.lb. .41 - —
Lead, red, 95% Pb_3O_4, or less, bbls., c.l., works, frt. alld lb. .19 - —
t.c.l., same basis .....lb. .20 - —
97% Pb_3O_4, bbls. c.l., same basis. lb. .192 - —
t.c.l., same basis.....lb. .202 - —
98% Pb_3O_4, bbls., c.l., same basis. lb. .1935- —
t.c.l., same basis .....lb. .2035- —
Resinate, precip., 23% Pb, dms., dlvd..lb. .32½- —
Salicylate, normal, dms., works lb. .46 - —
Silicate (see Lead, white, basic, silicate).

Lead sulfate (see Lead, blue, basic, sulfate) Lead, white, basic sulfate)
Tallate, liq., 16% Pb, dms....lb. .15 - —
24% Pb., dms .....lb. .18½- —
solid 30% lb 23¼- —
White, basic, carbonate, bgs, c.l., shipt. point, frt. alld...lb. .19 - —
t.c.l. same basis lb. .20 - —
Lead, white, basicsilicate, bgs., c.l., shipt. point, frt. alld..lb. .17¼- —
t.c.l., same basis lb 18¼- —
sulfate bgs. c.l. shipt. point, frt. alld lb .17¼- —
t.c.l., same basis lb .18¼- —
Lecithin, edible, tech., bleached, non-ret. dms., c.l., works lb .14 - .15
l.c.l., same basis .....lb .16 - .17
unbleached, non-ret. dms., c.l., same basis lb .13 - .14
t.c.l., same basis ...lb .15 - .16
Lemon bioflavonoid complex, 25-lb lots, works lb 9.00 —
Lemon oil, terpeneless, bots.....lb.50.00 -85.00
USP, Calif., cns., dms.....lb. 4.00 - 5.00
Messina, cns. .....lb. 5.75 - —
Lemongrass oil, cns., dms.....lb. 1.40 - —
dl-Leucine, dms, works .....lb 12.25 -15.00
Licorice root, whole, bbls..... lb .10 .12
gran., bbls .....lb .15 .17
powd. bbls ... .lb 12 .15
Lignaloe wood oil, Mexican, cns..lb. 4.65 - 5.00
Lignosulfonate, 70% tannin, ogs., c.l. works lb. 06½- —
t.c.l. works lb .06¾- —
Lime, chemical (quicklime), bulk, c.l., metropolitan N Y destination, freight equalized with nearest producing point .ton.20.82 - —
Hydrated, bulk c.l., same basis ton.22.32 - —
Spray, bgs., c.l., same basis. ton.26.32 - —
Lime oil, dist., Mexican, cns....lb. 5.00 - 5.25
West Indian, cns. .....lb. 5.00 - —
Expressed West Indian, cns....lb. 6.00 - 8.00
Terpeneless, bots. .....lb.50.00 -85.00
Lime salts (see Calcium)
Lime-ammonium nitrogen 20.5% N (see Ammonium nitrate with dolomite)
Limestone grd., bgs. works ton. 3.50 4.00
Linalool, ex bois de rose oil, dms. lb. 3.65 4.80
ex lignaloe wood oil, dms lb 5.30 7.10
Linalyl acetate ex bois de rose, 90-92%, dms lb 3.30 5.10
96-98% dms lb 4.05 6.75
ex petitgrain, bots lb. 4.80 5.90
Lindane, 25% formulation, dealers, dms., frt. alld lb. 1.58 1.68
99% tech formulators, dms, frt. alld lb 2.65 2.25
Linden flowers with leaves, bls lb .25 - —
without leaves, bls lb .30 - —
Linseed meal, expeller, 32-34% bulk Midwest mills..ton.56.00 - —
extracted 36% bulk, same basis ton.55.00 -56.00
Linseed oil, raw, dms., c.l., N. Y. lb. .1630- —
dms., l.c.l. .....lb. .1730- .1780
tanks, f.o.b. Minneapolis....lb. .1300- —
tanks, New York .....lb. .1440- —
tankwagon, New York.....lb. .1470- .1480
Boiled linseed oil, 006c. per lb. higher.
Linseed oil acids, dist., dms.....lb. .1940- —
Water- white, dms.....lb. .2240- —
Linseed pitch, dms. .....lb. .06 - .06¾
Litharge, comi. powd. bbls., c.l., works, frt. equald lb. 18 - —
t.c.l., same basis lb. .19 - —
Lithol red toner, bbls., works lb. .93 - —
Lithol-rubine red toner, pure bbls., works..lb. 1.50 - —
Resinated, bbls., works.....lb. 1.40 - —
Lithium benzoate, dms lb 1.65 1.67
Bromide NF dms. works, frt. equald lb. 2.60 - —
Carbonate, NF, dms., c.l., t.l., dlvd. lb. 1.29½- —
ton lots to t.l. dlvd lb. 1.30 - —
tech., dms., c.l., t.l., dlvd., frt. alld. works lb. .82 - —
t.c.l. same basis lb .85 1.11½
Chloride, CP, anhyd. ton lots lb. 1.23½- —
tech., anhyd., dms. c.l., t.l., dlvd. or works, frt. alld lb. 1.00 1.05
t.c.l. same basis lb 1.05 1.05½
Citrate, NF, dms .....lb. 1.60 1.64
Fluoride, bbls., 10,000-lb. lots, dlvd. lb. 2.17½- —
ton lots, dlvd lb 2.18½- —
less ton lots, dlvd lb 2.23½- —
Hycride powd. dms., 500-lots, works lb.10.50 -12.50
Hydroxide, monohydrate, dms., dlvd..lb. .78 - —
Manganite, dms., works lb .95 1.15
Nitrate, tech. dms. 100-lb. lots. lb 1.25 —
Salicylate, dms. lb 1.60 1.70
Silicate, dms., works lb 1.10 1.30
Stearate, dms., c.l., works ....lb. .47½- —
ton lots, works .....lb. .45½- —
less-ton lots, works .....lb .53½- —
Sulfate, dms., 100-lb lots ....lb. 1.15 - —
Titanate, dms, works ... lb 1.45 1.35
Lithopone, ord., bgs, c.l., dlvd. E lb. .08 - —
t.c.l., dlvd E lb. .08¾- —
titanated (high-strength), bgs., c.l., dlvd .....lb. .10 - —
t.c.l., dlvd .....lb .11 - —
Lobelia herb, bls lb 1.30 —
Lobeline sulfate, bots., works oz.37.50 -38.50
Locust bean gum, powd., bgs...lb. .50 - —
Logwood extract, cryst. No 1, bbls., l.c.l lb. .41 - —
No. 2, bbls., l.c.l.....lb. .39 - —
liq., No. 1, bbls., l.c.l.....lb. .20 - —
No. 2, bbls., l.c.l .....lb. .19 - —
No. 3, bbls., l.c.l.....lb. .18½- —
solid No. 1 boxes, c.l.....lb. .35 - —
Lycopodium, cs .....lb. 3.00 - 3.50
dl-Lysine monohydrochloride, fib. dms lb.12.00 - —
l-Lysine, fib. dms .....lb.12.00 -13.00

M

Mace, Siauw, siftings, bls.....lb. 3.25 - —
West Indian, No. 1, bls. shipment lb. 3.25 - —
Mace oil, dist., cns., dms.....lb.14.00 - —
Magnesia, calcined, tech., bgs., ctns, frt. equald...lb. .25¾- .26½
syn. rubber grade, light, bgs., c.l., frt. equald. lb. .29¾- .30½
extra light, bgs., c.l., frt. equald. lb. .29¾- —
l.c.l. .....lb. .30½- —
USP, light, bgs.....lb. .36½- .37⅛
heavy, fib. dms.....lb. .45 - .52
Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt. equald ton.82.50 - —
dead-burnt, standard grain, bulk, c.l., Chawelah, Wash. ton.43.00 - —
Magnesium bromide, cs., jars....lb. .95 - 1.00
Carbonate, tech., bgs., c.l., frt. equald lb. .10½- —
t.l., frt. equald.....lb. .11 - —
l.c.l., frt. equald.....lb. .12½- .13½
USP, bgs., c.l., frt. equald.....lb. .13 - —
t.l., frt. equald.....lb. .13½- —
l.c.l., frt. equald.....lb. .14½- .15½

Above prices are quoted f.o.b. works, freights equalized with metropolitan New York and competitive producing points.

This Label Is Your ASSURANCE of FIRST GRADE, HIGHEST QUALITY LEMON OIL

because...

- The M.C.P. label is that of one of the nation's oldest specialists in quality citrus products — pectins, juices, concentrates, etc.
- It's the *producer's* label — which means that M.C.P. LEMON OIL is pure and unadulterated...cold-pressed in California and *packed by the producer* . . . to assure the user receiving it pure and unadulterated.
- It identifies M.C.P. LEMON OIL as one that meets all the long-accepted standards for highest quality and finest flavor.
- There is but one M.C.P. LEMON OIL label, and this is what it means:—*An exclusively first grade lemon oil, for M.C.P. packs but this one top grade!*

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MUTUAL CITRUS PRODUCTS COMPANY
Since 1928 Growers and Processors of Citrus Products

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MUTUAL CITRUS PRODUCTS CO.
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W. J. BUSH & CO., INC.
137 Boston Post Road, Cos Cob, Conn.

Magnesium chloride, anhyd., 92% flake or pebble, dms., c.l., works	lb.	.12¾	—
l.c.l., works	lb.	.14	.15
hydrous, 99% flake, bgs., c.l., works	ton.	55.00	—
l.c.l., works	ton.	65.00	80.00
Gluconate, dms. cns	lb.	1.34	1.41
Hydroxide, NF, powd., bbls., dms., kgs	lb.	.23½	.27
Magnesium metal, 99.8% ingots, 10,000 lb. lots or more, works	lb.	.36	—
pigs, 10,000-lb. lots or more, works	lb.	.35¼	—
sticks, cs., works, frt. alld. on carlots	lb.	.59	—
Oxide (see Magnesia, calcined).			
Nitrate, cryst., dms., works	lb.	.20	—
Peroxide, 15%, dms., works	lb.	1.00	1.05
Phosphate, tribasic, NF, bbls.	lb.	.75	—
Silicate (see Talc).			
Silicofluoride, dms., works	lb	10½	.12
Sulfate, tech., bgs., c.l., works, 100 lbs.		2.15	—
l.c.l. works	100 lbs.	2.90	3.15
USP, cryst., bgs., c.l., works, 100 lbs.		2.35	—
l.c.l. 5,000 lbs., 1 withdrawal	100 lbs.	3.10	—
smaller lots	100 lbs.	3.35	—
Trisilicate, USP, dms., 5,000-lb. lots	lb.	.38	—
1,000-lb lots	lb.	.40	—
100-lb lots	lb.	45	—
Bulky and super grades of magnesium trisilicate 7c per lb. higher			
Malachite green, straight, PTMA, bbls., works	lb.	5.30	—
Malathion, dms., c.l., works	lb.	.90	—
l.c.l., works	lb.	.92	1.02
Maleic acid, cryst., powd., dms	lb.	.37	.38
Maleic anhydride, dms., c.l., dlvd. E	lb.	.26½	—
l.c.l. dlvd. E	lb.	.29½	—
tanks, dlvd. E	lb.	.27½	—
Prices on maleic anhydride W of Rockies 1½c higher			
Malic acid, tech., dms.	lb.	.50	—
Mandelic acid, NF, dms., 1,000-lb. lots	lb.	2.35	—
dms., smaller lots	lb.	2.40	2.50
Mandrake root, bls	lb.	.55	.60
Manganese acetate, bbls. dlvd	lb.	.35	—
Arsenate, bgs	lb.	.16	—
Borate, tech., fib. dms	lb.	.25	—
Carbonate, bbls. works	lb.	.22	—
Chloride, anhyd., dms., works	lb.	.25½	—
Dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, burlap paper lined bgs., gross for net, works	ton.	148.00	—
paper bgs., works	ton.	144.50	—
dms., works	ton.	152.50	—
Prices for manganese dioxide in 10,000 to 40,000-lb lots $3 per ton higher			
Gluconate, dms	lb.	1.80	1.94
Hydrate, bbls. dlvd	lb	.36	—
Hypophosphite, NF, dms	lb	3.52	—
Linoleate, liq., 4.35% Mn, dms.	lb.	.32½	—
solid, precip., 8.2% Mn, bbls	lb.	.37½	—
Naphthenate, liq., 6% Mn., dms., frt. alld	lb.	.27	—
Resinate, fused 3½% Mn, dms.	lb.	.24	—
precip 6½-7% Mn, dms	lb	28	—
Sulfate, fertilizer grade, 65% sulfate, c.l., dlvd S.E.	ton.	88.55	—
t.c.l. dlvd S E	ton.	95.55	—
Tallate 6% dms	lb	24	—
Mangrove bark, E. African, 38% tannin, c.l., ex dock	ton.	62.00	—
So. American 30% tannin, c.l., ex dock	ton.	54.00	57.00
Manila copal gum, C, bgs.	lb.	.34¾	.38
CBB, bgs	lb.	No stocks.	
DBB, bgs.	lb.	.25½	.28
DK, bgs	lb.	No stocks.	
DK, dust., bgs	lb.	.14	Nom.
MA, soft, bgs.	lb.	.19¾	.22
WS, bgs	lb.	No stocks.	
Mannitol, com'l, fib. dms., ton lots, works	lb.	.60	—
dms., to ton lots, works	lb.	.62	—
single dm., works	lb.	.65	—
Marine pitch, dms.	lb.	.04½	.05
MBTS (see Mercaptobenzothiazyl disulfide)			
MBT (see 2-Mercaptobenzothiazole).			
Melamine, bgs., c.l., works	lb.	.30	—
l.c.l., works	lb.	.31	—
Menadione USP bots.	gram	.044	.05
Menhaden oil, crude, tanks, works, Atlantic & Gulf	lb.	.08¼	.08⅜
Menthol, nat., USP, Brazilian, cs.	lb.	6.35	6.50
syn., USP, racemic, cns	lb.	4.75	—
2-Mercaptobenzothiazole, bgs., fib. dms. ton-lots works, frt. alld	lb.	.42	—
less ton lots, same basis	lb.	.44	—
Mercaptobenzothiazyl disulfide, bgs., fib dms. ton-lots works, frt. alld	lb.	.52	—
less ton lots, same basis	lb.	.54	—
Mercuric chloride NF, cryst., dms., 50-lb lots or more	lb.	4.93	—
gran. or powd., dms., 50-lb. lots or more	lb.	4.78	—
Cyanide, NF VIII, powd. fib. dms.	lb.	6.84	—
Iodide red NF fib dms	lb	7.72	—
Mercuric oxide red, NF, powd., fib. dms.	lb.	5.97	6.01
Tech., c.l., works	lb.	5.77	—
Mercuric oxide yellow, bbls., 1,000-lb. lots	lb.	5.58	—
Bbls., smaller lots	lb.	5.60	—
USP, fib. dms	lb.	6.14	—
Mercurous chloride (see Calomel).			
Iodide, yellow, NF	lb.	7.72	—
Mercury, ammoniated (see White precipitate USP)			
Metal, 76 lb per flask net-flask		253.00	257.00
Mesityl oxide, dms., c.l., dlvd	lb.	.14	.14½
l.c.l. dlvd	lb.	.15	.15½
tanks, dlvd	lb.	.11½	.12
Meta-aminophenol (see m-Aminophenol).			
Metachloroaniline (see m-Chloroaniline)			
Metanilic acid, dms., works	lb.	.57	.75
Metanitroparatoluidine (see m-Nitro-p-toluidine).			
Metanitroaniline (see m-Nitroaniline).			
Metaphenylenediamine (see m-Phenylenediamine)			
Metatoluidine (see m-Toluidine)			
Metatolylenediamine (see 2,4-tolylenediamine).			
Methacrylic acid, glacial, 98%, dms., truckloads, works	lb.	.47	—
dms., smaller lots, works	lb.	.47½	.80
tanks, works	lb.	.45	—
Methanol, nat. denaturing grade, tanks, frt. alld.	gal.	.75	.85
dms., c.l., dlvd.	gal.	1.00	—
syn., Zone 1, dms., c.l., dlvd. or truckload min., frt. alld.	gal.	.46½	—
l.c.l. works	gal.	.55½	—
tankwagon, 2,000-4,000 gal. lots, dlvd. Metropolitan area	gal.	.35½	—
4,000 gal. min., frt. alld. or dlvd	gal.	.32½	—
Methanol, tankwagon, 4,000 gal. min., works, Carteret, Camden N. J.	gal.	.29½	—
Zone 2, dms., c.l. or truckload min. frt. alld. or dlvd	gal.	.31½	—
l.c.l., works	gal.	.58½	—
tankwagon 2,000-4,000-gal. lots, min., dlvd. Metropolitan area	gal.	.38½	—
Methanol, Zone 2, tanks, 4,000 gal. min., frt. alld. or dlvd.	gal.	.35½	—

Synthetic methanol zones are:—Zone 1 is all continental U. S. E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of U S west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.

Methenamine (see Hexamethylenetetramine).			
dl-Methionine, fib. dms., frt. alld. 50-lb or more	lb.	3.50	—
feed grade, 98%, fib. dms., same basis	lb.	2.68	—
Methoxychlor, 50% wettable powder, dealers dms., cs., frt alld	lb.	.61	.64
Methyl abietate, non-ret. dms., c.l., dlvd zone 1	lb.	.20½	—
t.c.l. same basis	lb.	.21	—
Methyl abietate, hydrogenated, non-ret. dms., c.l., dlvd., Zone 1.	lb.	.21	—
t.c.l., same basis	lb	21½	—

Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn.

Methyl acetone, nat., dms., l.c.l., E. of Miss., frt. alld	gal.	.62½	—
syn., dms., c.l., frt. alld. E	gal.	.63½	—
E	gal.	.63½	—
l.c.l., frt. alld E	gal.	.69½	—
tanks, frt alld. E	gal.	.48½	—

Synthetic methyl acetone E territory is all States East of and including Colo., Mont., N. Mex. and Wyo. West territory all states west of those four.

Acrylate, dms., c.l., t.l., dlvd	lb.	.39	—
t.t.l., dlvd	lb.	.40	—
tanks, dlvd	lb.	.37	—
Alcohol (see Methanol).			
Methyl amyl acetate, dms., c.l., dlvd. E	lb.	16½	—
l.c.l., dlvd E	lb.	.17½	—
tanks, dlvd E	lb.	.14	—
Methylamyl alcohol (see Methyl isobutyl carbinol).			
Methylamyl ketone, dms., works	lb.	1.05	—
Methyl anthranilate, cns.	lb.	2.35	2.65
Benzoate, cns., dms	lb.	.60	.75
Bromide, jobbers, cyls., various sizes, frt. alld. E	lb.	.47	.51
Cellulose, special vis. (1,500-4,000 cps.), 50 lb. bgs, c.l., works	lb.	.78	—
2,000-lb. lots and more, same basis	lb.	.65	—
Methyl cellulose, special vis., (1,500-4,000 cps.), smaller lots, frt. alld. on 100 lbs.	lb.	.89	1.00
standard vis. (15,400 cps.), 50-lb. bgs., c.l., frt. allid.	lb.	.60	—
2,000-lb. lots and more, same basis	lb.	.72	—
smaller lots, frt. allid. on 100 lbs	lb.	.75	.85
Chloride, indust., cyls., frt. equald.	lb.	.21½	—
tanks, multi-unit, same basis.	lb.	.15½	—
single unit, same basis	lb.	.12	—
refrigerator mfrs., cyls., dlvd	lb.	.46	.48
other consumers or service men, cyls., dlvd	lb.	.67	—
Chloroform (see 1,1,1,-trichloroethane).			
Cinnamate, cns	lb.	1.55	1.80
Methyl ethyl ketone, dms., c.l., dlvd.	lb.	.14½	—
l.c.l., dlvd	lb.	.15½	—
tanks, dlvd	lb.	.12	—
Formate, refd., dms.	lb.	.35	.40
tech., non-ret dms., any quantity, works	lb	.10	—
Heptin, carbonate, bots	lb.	31.00	42.00
p-Hydroxybenzoate, fib. dms.	lb.	1.90	2.00
Ionone, standard, cns., dms.	lb	5.00	5.23
Isobutyl carbinol, dms., c.l., dlvd.	lb.	.16½	—
l.c.l., dlvd	lb.	.17½	—
tanks, dlvd	lb.	.14	—
Methyl isobutyl ketone, dms., c.l., dlvd.	lb.	.16½	—
l.c.l. dlvd	lb.	.17½	—
tanks, dlvd	lb.	.14	—
Methacrylate, dms., c.l., t.l., frt. equald, with Melle, W. Va	lb.	.31	—
smaller lots, same basis	lb.	.31½	—
tanks, same basis	lb.	.29	—
Naphthyl ketone, cryst., cns	lb.	3.00	4.30
Parahydroxybenzoate (see Methyl p-Hydroxybenzoate)			
Roseaniline chloride, NF, 5-lb. fib. dms.	lb.	6.54	—
Salicylate, USP, cns., 500-lb lots	lb.	.62	—
Testosterone, USP, 100-gram bots.	gram	.68	—

NOW!
larger production
and higher quality
MAGNESIA COMPOUNDS

for
industrial
and
chemical
applications

NEW PLANT FACILITIES provide industry with more types and volume of magnesia compounds . . . used as fillers, extenders . . . for conditioning, chemical or physical agents . . . and for many other purposes in a wide range of products. Continuing twenty years of high-quality chemical production from superlative Michigan natural brines, Michigan Chemical Corporation can now supply your added requirements for the best in magnesia compounds . . . whether your business is textiles, rubber, chemicals, refractories, insulation, ceramics or fertilizer blending.

TYPICAL ANALYSES OF MICHIGAN MAGNESIA COMPOUNDS

	No. 1 Calcined Magnesite	No. 5 Calcined Magnesite	No. 15 Calcined Magnesite	No. 30C Light Calcined Magnesia	No. 40 Extra Lt. Calcined Magnesia	Basic Magnesium Carbonate	(NF Grade) Magnesium Hydroxide	(Tech. Grade) Magnesium Hydroxide
Bulk density, weight per cubic foot	60 lb.	28 lb.	24 lb.	8½ lb.	5 lb.	5.5 lb.	15 to 25 lb.	app. 20 lb.
Ignition loss:	0.5%	1.5%	2.5%	1.9%	3.0%	56.5%	PASSES N. F. IX SPECIFICATIONS	31.4%
Chloride (as Cl):	0.08	0.1	0.2	0.25	0.25	0.1		
Analysis, ignited basis:						NOT IGNITED		NOT IGNITED
SiO_2	0.3	0.3	0.3	0.3	0.3	0.15		0.20
Fe_2O_3	0.2	0.2	0.2	0.2	0.2	0.08		0.15
Al_2O_3	0.2	0.2	0.2	0.2	0.2	0.08		0.15
CaO	1.0	1.0	1.0	1.0	1.0	0.7		0.7
Mn				0.01	0.01	0.00		
Free Moisture						1.5		2.0
Screen test: Through 200 mesh		95%		99.9%	99.9%	99.99%	99.0%	99.0%
Screen test: Through 325 mesh			99.5%	99.5%	99.5%	99.5%		

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Methyl Violet Toner—1-Naphthol-5-Sulfonic 8-Amino Acid

Methyl violet toner, molybdated, PMA, bbls., dlvd. N. of Tenn. and N. C., E. of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis lb. 2.80 - —

Tungstated, PTMA, bbls., same basis lb. 4.35 - —

Methyl violet toner dlvd. prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equald. with Chicago.

2-Methylbenzylamine, dms., l.c.l. works lb 1.25 - —

2-Methylbenzyl dimethylamine, dms., c.l., works lb. 1.89 - —

c.l., works lb 1.90 - —

2-Methyl-5-ethyl pyridine, dms., c.l., works lb. .445 - —

l.c.l., works lb. .45 - —

tanks, works lb. .43 - —

Methylene blue, fib dms, 100-lb lots, frt adjusted lb. 3.25 - —

Methylene chloride, tech., dms., c.l., t.l., straight or mixed, works lb. .13¼- —

Dms., l.c.l., l.t.l., works lb. .16 - —

Tanks, 4,000-gal. min., tank trucks, max. load limit, works lb. .11¾- —

Tanktrucks, 1,000-gal. min., works. lb. .12¾- —

b-Methylnaphthalene, 32°C. m.p., dms., works lb 90 - —

Methylpentanediol (see Hexylene glycol).

Methylphenylpyrazolone (see 1-Phenyl-3-methylpyrazolone-5).

Methylthionine chloride (see Methylene blue).

Mica, dry grd., paint plastic, 100 mesh, bgs., c.l., works lb .04 - —

roofing, 20 to 80 mesh, works lb .03 - —

wet-grd. biotite, bgs., c.l., works, frt alld E lb. .06½- —

t.c.l. ex-whse lb .07¼- —

paint or lacq., bgs., c.l., 325 mesh, works, frt. alld E lb. .08¼- —

t.c.l. ex-whse or frt allg E lb .09 - —

rubber bgs. c.l. works frt. alld. E lb. .08 - —

t.c.l. ex-whse or frt. allld. E lb .08¾- —

Mica, wet grd., wallpaper, bgs., c.l., works, frt. allld. E lb. .08¾- —

t.c.l. ex-whse or frt allld. E lb. .09 - —

white 5-10 microns, bgs. c.l., works, frt. allld. E lb. .08¼- —

t.c.l. ex-wnse or frt allld. E lb .09 - —

Mica, wet-grd. W of Miss ½c. higher; W of Rockies 1c. higher

Microcrystalline wax, petroleum, coating grades, tankcars, works lb. .10 - .11

laminating grades, tankcars, works lb. .11 - .12

Mineral black, bgs., works lb. .0160- .0673

Mineral oil, white, tech., 50-65 vis., non-ret. dms., c.l., f.o.b. N. Y. gal. .59 - —

65-75 vis, non-ret. dms., c.l., same basis gal. .60 - —

non-ret. dms., l.c.l., same basis gal. .68 - —

80-90 vis., non-ret. dms., c.l., same basis gal. .61 - —

non-ret. dms., l.c.l., same basis gal. .68 - —

135-138 vis., non-ret. dms., c.l., same basis gal. .67 - —

non-ret. dms., l.c.l., same basis gal. .77 - —

145-155 vis., non-ret. dms., c.l., same basis gal. 73½- —

non-ret. dms., l.c.l., same basis gal. .80½- —

Mineral oil, white, tech., USP, 180-190 vis., non-ret. dms., c.l., same basis gal. .75 - —

non-ret. dms., l.c.l., same basis gal. .82 - —

200-210 vis., non-ret. dms., c.l., same basis gal. .79 - —

non-ret. dms., l.c.l., same basis gal. .85 - —

345-355 vis., non-ret. dms., c.l., same basis gal. .82½- —

non-ret. dms., l.c.l., same basis gal. .90½- —

Mineral orange, American, bbls., l.c.l., works lb. .2235- —

Mineral spirits, petroleum, reg. tanks, Calif., ex tax San Francisco gal. .169 - —

tanks, east coast, N. J., N. Y. gal. .18 - —

tanks, group 3 gal. .12875- —

Mineral spirits, petroleum, reg., tankwagon, Boston gal. .20 - —

Buffalo gal. .20½- —

Chicago gal. .289 - —

Cleveland gal. .23½- —

Newark gal. .19 - —

New York gal. .19 - —

Philadelphia gal. .19½- —

Pittsburgh gal. .19 - —

Providence gal. .20½- —

odorless, tanks, refy., Watson, Calif. gal. .25 - —

tanks, Borger, Tex. gal. .25 - —

Houston, Tex. gal. .25 - —

Philadelphia gal. .32 - —

Newark, dlvd. gal. .3328- —

N. Y., dlvd gal. .34½- —

Wood River, Ill. gal. .2725- —

tankwagon, N. J., dlvd. gal. .37½- —

tankwagon, N. Y., dlvd. gal. .38½- —

Mirbane oil (see Nitrobenzene).

MNPT maroon toner, kgs., c.l., works lb. 3.80 - —

Molasses, blackstrap, feed grade, tanks, New Orleans gal. .25½- .26

New York gal. .28 - .29

Molybdated orange, bbls. lb. .48 - —

Molybdenum metal, powd., 80 or 200 mesh ctns works kilo 7.84 - —

325 mesh ctns works kilo 9.13 - —

Trioxide, pure, dms., works lb. 1.15 - —

tech. dms. works basis Mo. content lb. 1.39 - —

Molybdic acid, 85%, dms., works lb. 1.20 - —

Monobutylamine dms. c.l., E. of Rockies lb. .55½- —

l.c.l., same basis lb. .56½- —

tanks, same basis lb. .53 - —

Monochloracetic acid, purif. (see Chloroacetic acid, mono).

Monochlorobenzene, dms., c.l., frt. allld or dlvd E lb. .10 - —

t.c.l. same basis lb. .11 - —

tanks, same basis lb. .08½- —

Monoethanolamine dms., c.l. dlvd. E lb. .27½- —

l.c.l. same basis lb. .28½- —

tanks, same basis lb. .25 - —

Monoethylalphanaphthylamine (see N-Ethyl-a-naphthylamine)

Monoethylamine 70% contained amine, dms., c.l., dlvd. E lb. .37½- —

l.c.l., dlvd E lb. .38½- —

tanks, dlvd E lb .35 - —

Monoethylaniline (see N-Ethylaniline).

Monoethylorthotoluidin (see N-Ethyl-o-toluidine).

Monoisopropanolamine dms., c.l., dlvd. E lb. .27½- —

l.c.l. same basis lb. .28½- —

tanks, same basis lb. .25 - —

Monoisopropylamine dms., c.l. dlvd. lb. .32½- —

l.c.l. same basis lb. .33½- —

tanks, same basis lb. .30 - —

Monomethylamine, 30-35% soln., dms., c.l., frt. equald 100% basis. lb. .40 - —

l.c.l., frt. equald 100% basis. lb. .40½- —

tanks, frt. equald 100% basis. lb. .31 - —

40% soln., dms., frt. equald., 100% basis lb. .37 - —

t.c.l. frt. equald. 100% basis. lb. .37½- —

tanks, frt. equald. 100% basis. lb. .31 - —

Glutamate, dms., c.l. lb. 1.15 - —

l.c.l. lb. 1.23 - 1.27

Phosphate (see Sodium phosphate monobasic)

Montan wax, dom., refd., bgs. lb. .29 - .30

Imp., crude, Bohemian, bgs. lb. .26 - .28

German, bgs. lb. .35 Nom.

Mono-tertiary-butylmetacresol (see 6-tert-Butyl-m-cresol)

Morphine cns oz. 12.40 -12.60

Acetate anhyd., cns oz. 9.95 -10.00

Hydrobromide, cns oz. 9.90 9.95

Hydrochloride, NF cns oz. 9.90 9.95

Sulfate USP cns oz. 9.90 -10.05

Morpholine, dms., c.l., dlvd E lb. .55¼- —

l.c.l., dlvd E lb. .56¼- —

tanks, dlvd E lb .52¾- —

Muriatic acid (see Hydrochloric acid).

Musk, syn. ambrette, 100-lb. lots, fib. dms lb. 4.45 - 5.15

25-lb. lots, cns lb. 5.05 - 5.65

5-lb. lots, cns lb. 5.20 - 5.50

Musk, syn., ketone, 100-lb. lots, fib. dms lb. 4.70 - 5.30

25-lb. lots, cns lb. 5.35 - —

5-lb. lots, cns lb. 5.45 - —

xylol, 100-lb. lots, fib. dms lb. 1.40 - —

25-lb. lots, cns lb. 1.45 - —

5-lb. lots, cns lb. 1.50 - —

Mustard seed, Danish, yellow, bgs lb. 10½- —

Du ch, bgs. lb. .10½- —

English, yellow, bgs. lb. .11 - —

Montana, oriental, bgs. lb. .08½ Nom.

Yellow, bgs lb. .10½- —

Mustard seed oil, nat. dms. lb. .17½ Nom.

Syn., bots. lb. 1.60 - 1.85

Myristic acid, dms. lb. .26 - .28

Myrobalans, J-1, genuine, bgs., ex-dock ton 61.00 -62.00

crushed, bgs. ex dock ton 79.00 -80.00

Bombay, bgs., ex dock ton 58.00 -59.00

Extract, Indian, solid, 55% tannin, bgs., ex dock, plus duty lb. .10 - .10¼

Myrrh gum, cs. lb. .55 - —

N

Naphtha, petroleum, 140°F. flash, tanks, east coast, N.J., and N.Y. gal. .18 - —

tanks, group 3 gal. .155 - —

tankwagon, Newark gal. .19 - —

New York gal. .19 - —

Philadelphia gal. .19½- —

Naphtha, high solvency (see Solvent naphtha, petroleum).

Naphtha, VM&P, petroleum, 225°-300° F., b.p., tanks, west coast, Los Angeles gal. .174 - —

tanks, Portland, Ore. gal. .18 - —

San Francisco gal. .179 - —

Seattle, Wash. gal. .18 - —

east coast, N. J., and N. Y. gal. .19 - —

group 3 gal. .13875- —

tankwagon, Boston gal. .21½- —

Chicago gal. .299 - —

Cleveland gal. .24½- —

Newark gal. .20½- —

New York gal. .20½- —

Philadelphia gal. .21½- —

Pittsburgh gal. .20 - —

Naphthalene, crude, dom., 74°, tanks, frt. equald lb. .06¼- —

78°, bgs., c.l., same basis lb. .07½- .08

t.c.l. same basis lb. .07¾- .08¼

tanks, same basis lb. .07 —

fmp. 78° bgs. large lots lb. .05 Nom.

refd., indust., chipped, crushed, bgs., frt. alld. lb. .12½- —

tanks, same basis lb. .11¾- —

Naphthalene, refd., indust., balls, flakes, wholesalers, jobbers, bbls., c.l., same basis lb. .15½- —

cs. 50 lbs. c.l., same basis lb. .15¾- —

1-lb. pkgs. c.l., same basis lb .18½- —

1-Naphthol-4 sulfonic acid (see Nevile and Winther's acid).

1-Naphthol-5-sulfonic acid (see L acid).

1-Naphthol-5-sulfonic 8-amino acid (see S acid).

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Davison, the first commercial producer of synthetic petroleum cracking catalysts, operates a modern plant for the sole purpose of producing specialty catalysts to aid industrial chemical progress. These catalysts can be custom made to your specifications. We guard your "know-how" as carefully as we do our own. They are made in many forms including granular, pelleted, powdered, spherical, extruded and include many supports and active agents.

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Producers of: Catalysts, Inorganic Acids, Superphosphates, Triple Superphosphates, Phosphate Rock, Silica Gels and Silicofluorides. Sole Producers of DAVCO® Granulated Fertilizer.

1-Naphthol-3,6-disulfonic 8-amino acid (see H acid).
2-Naphthol-6,8-disulfonic acid (see Gamma acid).
5-Naphthol-7-sulfonic 2-amino acid (see J acid).
Naphthol sulfonic mixed acid (see Cleve's acid).
1-Naphthylamine-5-sulfonic acid (see Laurent's acid).
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid).
2-Naphthylamine-6-sulfonic acid (see Broenner's acid).
2-Naphthylamine-7-sulfonic acid (see F acid).
2-Naphthylamine-1-sulfonic acid (see Tobias acid).

a-Naphthol bbls. frt. alld	lb.	1.00	—
b-Naphthol, tech. flake, bbls., c.l., works	lb.	.33	—
l.c.l., works	lb.	.35	—
Naphthol ITR red toner, bbls., works	lb.	5.50	—
a-Naphthylamine bbls. frt alld	lb	.50	—
b-Naphthylamine tech. flake, bbls., works	lb.	1.60	—
Naringin, fib, dms	lb.	8.50	—
Neatsfoot oil, 15° cold test, dms.	lb.	.30	.33
20° cold test, dms.	lb.	.29	.32
30° cold test, dms.	lb.	.28	.31
Neocinchophen USP dms., frt, adjusted	lb.	7.00	8.00
Neomycin sulfate, fib. dms., 5 kilo lots, basis, activity gram.		.45	—
100-999 gram lots, basis, activity, gram		.55	—
Neroli oil, NF, French bots	lb.	575.00	—
Nerolin, cns	lb.	2.43	2.65
Nevile and Winther's acid, dms., frt, alld	lb.	1.30	—
Niacinamide (see Nicotinamide)			
Nickel acetate, bbls. dlvd	lb.	.73	.80
Carbonate, bbls., dlvd	lb.	.80¾	.87¾
Chloride, bbls., dlvd	lb.	.40½	.48½
Formate, bbls., ton lots, frt, alld	lb.	.72	.73
Metal, electrocathodes, cs., works,	lb.	.74	—
Nitrate, bbls., works	lb.	.32½	.33½
Oxide, black, bbls	lb.	.84	—
green, bbls	lb.	.85	—
Sulfate, bgs., c.l., dlvd	lb.	.32½	—
l.c.l., dlvd	lb.	.33½	.40½
Nicotinamide USP dms. frt adjusted kilo.		9.50	9.80
Hydrochloride dms. frt adjusted kilo.		9.00	9.30
Nicotine sulfate, 40%, dealers, 50-lb. dms., frt alld	lb.	1.20	—
manufacturers, 500-lb. dms., frt alld	lb	1.05	—
Nicotinic acid, USP, dms., dlvd. kilo.		8.00	8.30
Nicotinic amide, USP (see Nicotinamide).			
Niger seed, ngs	lb.	.12	.12¼
Nikethamide cbys	lb	7.50	—
Nitric acid, 36° Be, cbys., c.l., works, E	100 lbs.	5.75	—
cbys., l.c.l., works, E	100 lbs.	6.05	6.85
38° Be, cbys., c.l., works, E.	100 lbs.	6.25	—
cbys., l.c.l., works, E	100 lbs.	6.55	7.35
40° Be, cbys., c.l., works, E.	100 lbs.	6.75	—
cbys., l.c.l., works, E	100 lbs.	7.05	7.85
42° Be, cbys., c.l., works, E.	100 lbs.	7.25	—
cbys., l.c.l., works, E	100 lbs.	7.55	8.35
58.5 to 68% HNO_3, tanks, works, 100% basis	100 lbs.	3.90	—
94½ to 95½% HNO_3, tanks, works, 100% basis	100 lbs.	4.90	—
CP, NF, consumer, cbys. extra, c.l., works	lb.	.18½	—
cbys. extra, l.c.l., same basis	lb.	.20	.20½
5-pt. bots. extra, cs., c.l., same basis	lb.	.22½	—
5-lb. bots. extra, cs., l.c.l., same basis	lb.	.24	.25
m-Nitroaniline cryst. dms. frt alld.	lb.	1.15	—
paste, dms., frt. alld., 100% basis.	lb.	1.10	—
o-Nitroaniline flaked, dms. c.l., frt. alld	lb.	.49	—
l.c.l. frt alld	lb	.51	—
o-Nitroaniline orange toner, kegs	lb.	1.35	—
p-Nitroaniline, dms., frt alld	lb.	445	—
Nitrobenzene, dbl dist., dms., c.l., frt. alld	lb.	.14	—
l.c.l. frt. alld	lb.	.15	—
tanks, frt. alld	lb.	.12	—
p-Nitrobenzoic acid, dms., c.l., works	lb.	.72	—
Dms., l.c.l., works	lb.	.73	—
Nitrocellulose ester soluble, 30-35 cps., ¼, ½ ¾, 5-6, 15-20, 30-40, 60-80, 125-175, secs., bbls., c.l., works	lb.	.34	—
l.c.l., same basis	lb.	.35	.37
18-25 cps. bbls c.l., same basis	lb.	.36	—
l.c.l., same basis	lb.	.37	.39
250-400, 600-1,000 secs., bbls., c.l., same basis	lb.	.39	—
l.c.l. same basi	lb.	.40	.42
Spirit-soluble, 30-35 cps., ¼, ½, secs., bbls., c.l., same basis,	lb.	.41	—
l.c.l. same basis	lb.	.42	.44
5-6 cps., 40-60 secs., bbls., c.l., same basis	lb.	.40	—
l.c.l., same basis	lb.	.41	.43
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable			
o-Nitrochlorobenzene dms. c.l., frt. alld	lb.	.15	—
l.c.l. same basis	lb.	.16	—
tanks, same basis	lb.	.13	—
p-Nitrochlorobenzene, dms	lb.	.26	.27
2-Nitro-4-chlorophenol dms	lb.	.75	—
Nitroethane, dms. c.l. dlvd. E	lb	.24	—
l.c.l. dlvd E	lb.	24¾	—
tanks, dlvd. E	lb.	22½	—
Nitroethane prices West of Rockies are 1c. higher			
Nitrogen solutions, tanks frt. equald.	unit.	1.20	—
Nitrogenous process tankage, bulk, works	unit-ton	3.00	4.00
Sewage sludge, bulk, works,	unit-ton.	2.95+	.50
Nitromethane, dms., c.l. dlvd. E	lb.	.24	—
l.c.l. dlvd E	lb.	24¾	—
tanks dlvd E	lb.	22½	—
Nitromethane prices West of Rockies are 1c higher			
a-Nitronaphthalene bbls. frt. alld.	lb.	.41	—
Nitropropane-1 and 2, dms., c.l., dlvd E	lb.	22½	—
l.c.l. dlvd E	lb.	23½	—
tanks dlvd E	lb.	.21	—
Nitropropane prices West of Rockies are 1c higher.			
o-Nitrophenol dms. works, frt. equald	lb.	.94	—
p-Nitrophenol dms. frt alld. c.l.	lb.	.51	—
l.c.l.,	lb	53	—
o-Nitrotoluene dms. c.l. frt. alld.	lb	10	—
l.c.l frt alld	lb	11	—
tanks frt alld	lb	09	—
p-Nitrotoluene dms. works	lb.	.33	—
m-Nitro-p-toluidine dms	lb	1.59	—
Nitrous ether cone. bots 100-lb. lots	lb	1.28	1.38
Nonyl phenol dms c.l. frt. alld.	lb.	26½	—
l.c.l. frt alld	lb.	27½	—
tanks frt alld	lb.	24½	—
Nutgalls, Aleppo, bgs	lb.	.36	.38
Chinese, bgs.	lb	No prices	
Nutmeg, East Indian, bgs	lb.	2.80	—
West Indian, bgs	lb.	2.80	—
Nutmeg oil, USP, dist., East Indian, cns., dms.	lb.	15.00	—
West Indian, cns., dms	lb.	14.50	—
Nux vomica, bls	lb.	.10	.12
powd., bbls., bxs	lb.	.15	.17

O

Ocher (see Iron oxide yellow, nat.).			
Ocotea cymbarum oil, dms	lb.	.55	—
Octane, indust., tanks, Bayonne, N. J	gal.	.19	—
Baytown Tex	gal.	15¾	—
Borger, Tex	gal.	15¾	—
1-Octanol, tech., dms., c.l., dlvd.	lb	35	—
l.c.l. dlvd	lb.	.37	—
tanks, dlvd	lb.	.32½	—
Octyl alcohol, perfumer's grade, bots	lb.	1.60	3.25
Octyl alcohol, tech (see 1-Octanol, tech).			
Octyl phenol, bgs., c.l., works	lb	.24	—
l.c.l., works	lb	24½	—
tanks, works	lb	.23	—
Octyl phenol in dms., 11c. higher.			

Oils

Oil quotations, formerly grouped under one heading, are now listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

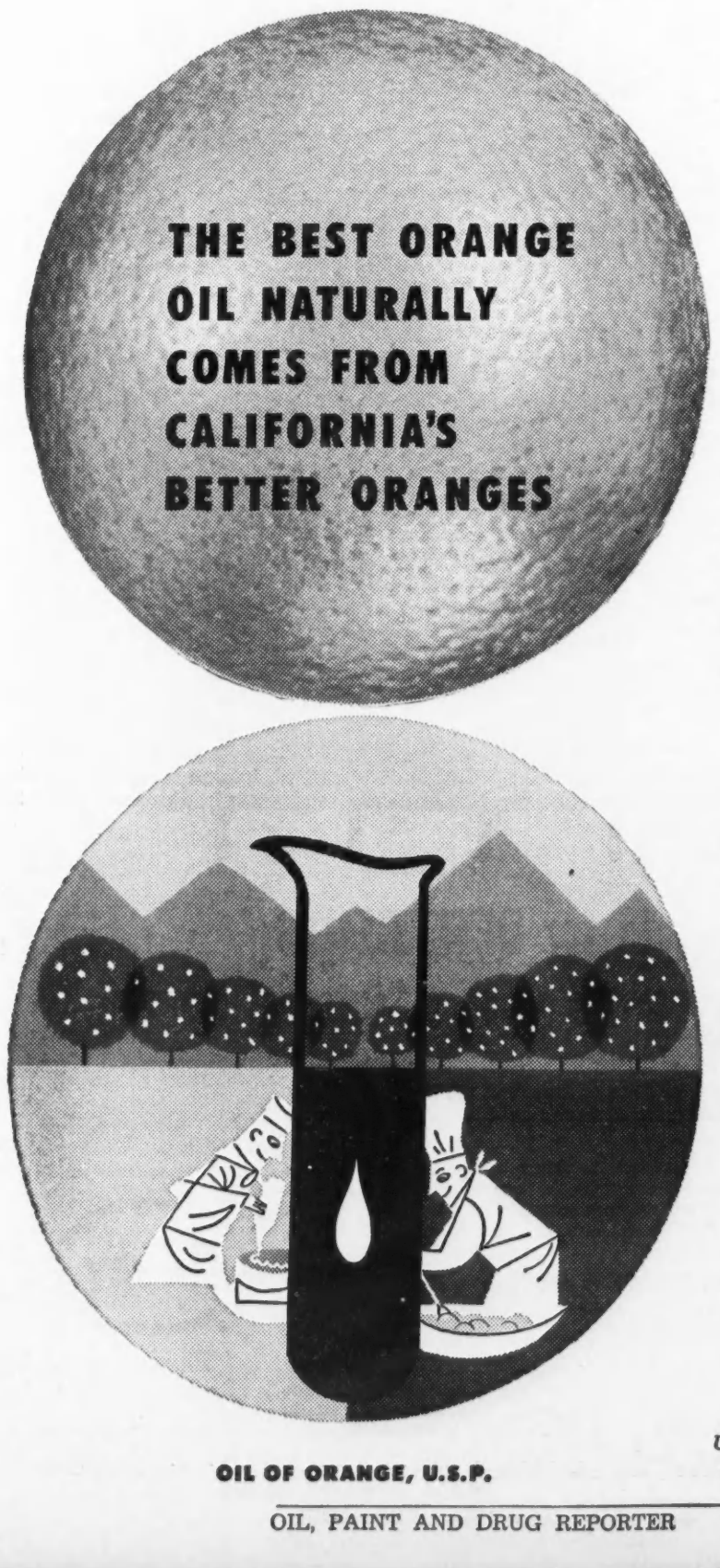
Oiticica oil, liq., dms	lb.	.18¾	.19
tanks	lb.	.17¼	—
Oleic acid, s.d., dms	lb.	.17¾	.19¾
tanks	lb.	.15¾	—
Dbl. dist. (white), dms	lb.	.19¾	.21¾
tanks	lb.	.17¾	—
Oleo oil, extra, dms	lb.	.18	.18½
Oleostearine, dms	lb.	.13	.13½
Oleum (see Sulfuric acid, fuming).			
Olibanum gum, siftings, cs	lb.	.20	Nom.
Tears, cs	lb.	.22	.30
Olibanum oil, bots	lb.	5.50	7.65
Extra fine, bots	lb.	8.00	9.00
Olive oil, edible, Spanish, dms., duty paid	gal.	3.70	Nom.
Edible, Tunisian, dms., same basis,	gal.	3.10	3.20
Opium, USP, cns	oz	19 20	19 45
gran., USP, cns	oz	21 65	21 90
powd USP cns	oz	21 65	21 90
Orange oil, expressed, USP, Brazilian, cns., dms	lb.	No stocks.	
Calif., cns., dms	lb.	.75	—
Florida, cns., dms	lb.	.55	—
Messina, cns	lb.	3.85	5.85
West Indian, cns., dms	lb.	2.50	3.65
Sesquiterpeneless, bots	lb.	65.00	120.00
Orange oil, sweet, dist., cns., dms.	lb.	.45	.80
Orange peel, bitter Haitian bls	lb	14	.16
sweet, bls	lb	.16	.18

Orange Pigments

Orange pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

Origanum oil, Spanish, cns	lb.	2.00	—
Orris root, Florentine, bls	lb.	.55	—
powd. bbls. bxs	lb.	.68	—
Verona bls.	lb	.35	.40
powd. bbls., bxs	lb.	.43	—

Orthoaminobiphenyl (see o-Aminobiphenyl)
Orthoanisidin (see o-Anisidine)
Orthochloroanilin (see o-Chloroaniline).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde)
Orthochlorobenzoic acid, (see o-Chlorobenzoic Acid).
Orthochloroparanitroanilin (see 2-Chloro-4-nitroaniline)
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).



OIL OF ORANGE, U.S.P.

Flavor is the most important factor in your finished product. Better *orange* flavor naturally comes from *better oranges*, and all tests prove California oranges are richer in flavor strength, more intense in aromatic constituents.

Wherever you use Oil of Orange, be sure your supplier provides Exchange Brand California Oil of Orange. No other oil of orange has the world-wide reputation of Exchange Brand, produced by the people who know citrus best—the Sunkist Growers of California.

Flavor is one of your least expensive ingredients. Doesn't it seem foolish to settle for cheaper, inferior orange oil when flavor is so important yet costs so little? Ask your supplier for Exchange Brand Oil of Orange, with its consistent year-after-year quality and its richer orange flavor.

Exchange

Sunkist Growers
Products Department • Ontario, California

Distributed in the U.S. and Canada by
Dodge & Olcott, Inc., 180 Varick St.
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Fritzsche Brothers, Inc., 76 Ninth Ave.
New York 11, N.Y.
Ungerer & Company, Inc.
161 Avenue of the Americas
New York 13, N.Y.

Inquiries from countries other than the U.S. and Canada should be directed to the Products Department, Sunkist Growers.

Orthocresotinic acid (see 2,3-Creosotic acid).
Orthodichlorobenzene (see o-Dichlorobenzene)
Orthonitroanilin (see o-Nitroaniline)
Orthonitrochlorobenzene (see o-Nitrochlorobenzene)
Orthonitrobiphenyl (see o-Nitrobiphenyl)
Orthonitroparachlorophenol (see 2-Nitro-4-chlorophenol)
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene)
Orthophenetidin (see o-Phenetidine)
Orthophenylphenol (see o-Phenylphenol)
Ortho tertiary-amylphenol (see o-tert-Amylphenol)
Orthotolidin (see o-Tolidine base)
Orthotoluidin (see o-Toluidine)
Osage orange cryst. No 1 bbls. l.c.l. lb 40 - —
extract liq. No 1 bbls. l.c.l., lb 19 —
Ouabain USP bots gram 3.00 - 4.00
Ouricury wax, refd., pure, bgs lb. .85 - .86
Tech., bgs lb. .80 - .82
Oxalic acid, bbls., c.l., works lb. .16½- —
bbls., 10,000-lb. lots, works lb. .16¾- —
bbls., smaller lots, works lb. .17¾- —
b-Oxynaphthoic acid, fib. dms., 250 lbs. or more, frt. alld lb. 1.14 - 1.17
Oxyquinolin sulfate cns. 100-lb. lots, works lb 4.75 5.00
smaller lots works lb 4.92 5.17

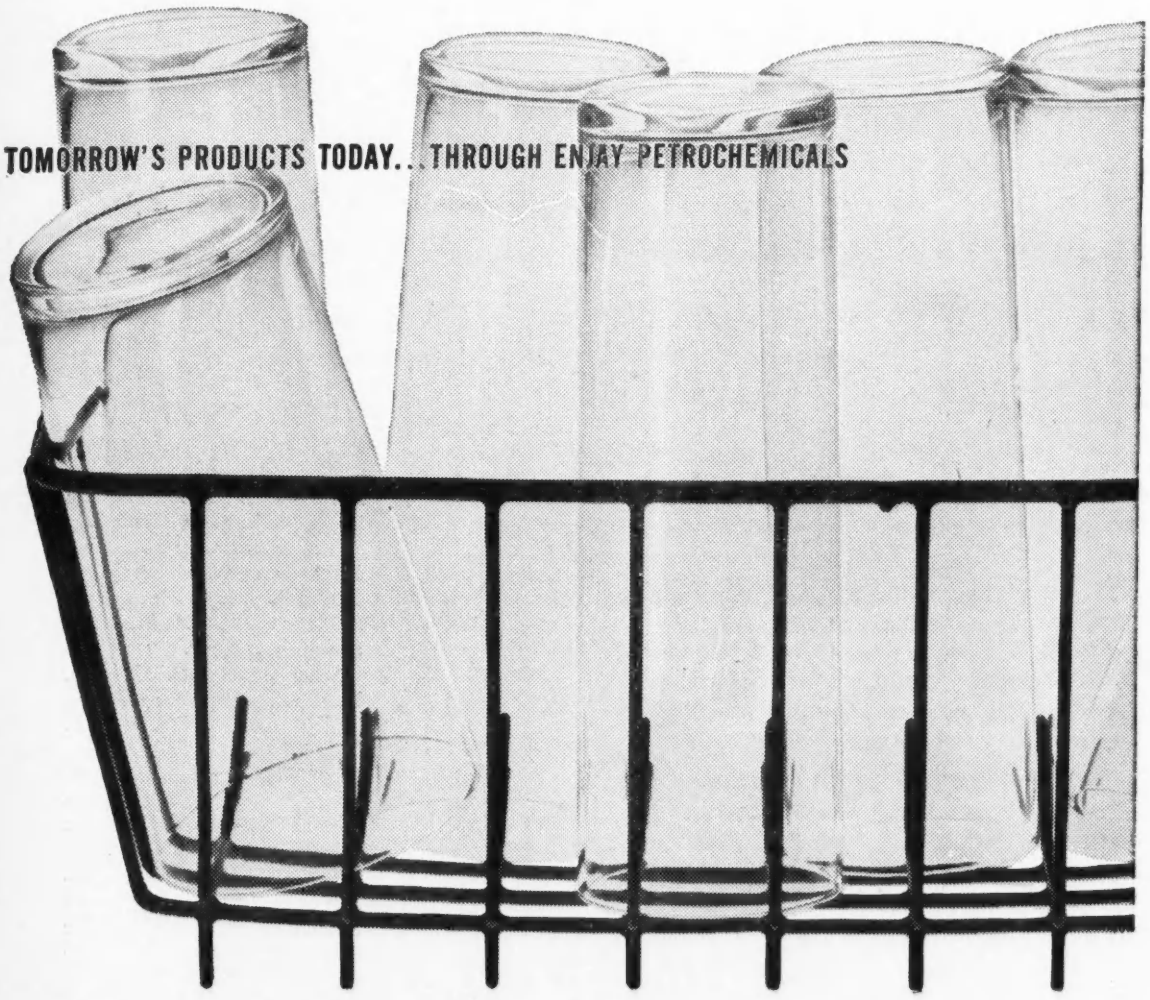
P

Palm oil, clarif., dms. lb. .15¼- .16¼
Palm oil acids, dist., dms. lb. .14¾- .16¾
tanks lb. .12¾- —
Palmarosa oil, cns lb. 6.50 - —
Papain, USP, African, bots lb. 5.00 - —
Ceylon lb. 4.50 - —
Papaverine, nat or syn hydro chloride USP cns., 25-oz to 100-oz lots oz 5.00 —
smaller lots oz 5.05 5.20
Sulfate cns. oz 7.10 7.35
Paprika Roumanian, bgs lb 26 —
Spanish bgs lb. 60 —
Yugoslavian bgs lb. 35 —
Para-aminobenzoic acid (see p-Aminobenzoic acid).
Para-aminosalicylic acid (see p-Aminosalicylic acid).
Parachlorobenzoic acid (see p-Chlorobenzoic acid).
Paramethylphenylcinchonic acid (see Neocinchophen).
Paranitrobenzoic acid (see p-Nitrobenzoic acid).
Paratoluidinmetasulfonic acid (see p-toluidine-m-sulfonic acid).
Para aminophenol (see p-Aminophenol)
Parachloro ortnonitroanilin (see 4-Chloro-2 nitro
Para anisidin (see p-Anisidine)
Parachloranilin (see p-Chloraniline)
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde).
Parachlorophenol (see p-Chlorophenol).
Paracresol (see p-Cresol).
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Para toner red, bbls. lb. 1.15 - —
Chlorinated, kgs. lb. 1.30 - —
Paraffin, crude, scale, white, 123°-127°F, ASTM, tanks, refy. lb. .0710- —
fully refd., 122°-124°F, ASTM, tanks, refy lb. .0815- —
125°-127°F, ASTM, tanks, refy lb. .0815- —
130°-132°F, ASTM, tanks, refy lb. .0815- —
132°-134°F, ASTM, tanks, refy lb. .0815- —
135°-137°F, ASTM, tanks, refy lb. .0815- —
AMP temperatures are an arbitrary 3°F higher than ASTM
Paraffin oil, pale, 100-110 vis. at 100-°F., tanks, east coast refy. gal. .14 - —
Paraffin wax (see Paraffin).
Paraformaldehyde 91% flake, bgs., c.l. frt. alld lb. .11¼- —
l.c.l., frt. alld lb. .13¼- .14¼
powd., bgs., c.l. ex whse lb. .167 - —
l.c.l., ex whse lb. .182 - —
USP, X, fib dms., c.l lb. .19 - —
1,000-lb. lots lb. .20 - —
smaller lots lb. .21½- —
Paraldehyde, tech. 98% 55-gal. dms., c.l., dlvd lb. .14 - —
l.c.l., dlvd lb. .15 - —
tanks, dlvd lb. .11½- —
Paranitroanilin (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene).
Paranitrotoluene (see p-Nitrotoluene).
Paranitrophenol (see p-Nitrophenol).
Paraphenetidin (see p-Phenetidine).
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol)
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol).
Parathion spray powder, 15%, dealers, bgs., dms., frt. alld lb .50 .53
tech., dms., c.l. t.l., works lb 1.3395- —
l.c.l., works lb 1.51 —
Paratoluenesulphonamide (see p-Toluenesulfonamide).
Paris green, dealer, dms., c.l., frt. alld lb .44 .47
l.c.l., same basis lb .45 .48
Passion flower herb, bls. lb .25 - —
Patchouli oil, dms. lb. 6.00 - —
Peach kernel oil, USP (see Apricot kernel oil).
Peacock blue, fugitive, 100% color strength, 250-lb. bbls., dlvd., N. of Tenn. and N. C., E. of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis lb. .90 - —
Peacock blue dlvd. prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equald. with Chicago.
Peanut meal 45% old process, bgs. mills ton 46.50 - —
Solvent extracted, bgs., mills ton 43.50 - —
Peanut oil, crude, tanks, f.o.b. mills. lb. .14¼- —
Refd., dms. lb. .20 - .20¼
tanks lb. .18 - —
Pectin, citrus, NF, powd., bbls lb 2.05 2.06
tech., powd., bbls. lb 1.25 —
Imported, Danish, ex whse lb 1.28 —
Penicillin, crvstalline, potassium, bulk 1,000,000 units. .0675- .0700
Procaine, bulk 1,000,000 units. .0675- .0700
Sodium, bulk 1,000,000 units. .0775- .0800
Pennyroyal oil, USP, imported, cns. lb. 2.75 - 3.50
Pentachlorophenol, dms., c.l., t.l., works, frt. equald lb. .22 - —
l.c.l., same basis lb. .23½- .30
Pentaerythritol, tech., bgs., c.l., works lb .32 —
l.c.l., works lb .33 - —
Di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane, indust., tanks, Tex. refy gal. .14 - —
Pepper, black, Malabar, spot, bgs. lb. .28½ —
Red, Gondar, spot, bgs. lb. No prices.
Japanese, hontaka bgs lb. .34 —
birdseyes, bgs. new crop lb No prices.
Mombasa, bgs., shipt lb. .56 .57
Nigerian, bgs lb .42 —
Turkish, bgs. lb .28 —
White, bgs. lb. .35 - .36
Peppermint leaves, USP, dom., bls., dms lb .70 .75
imp., bls lb. .85 - —
Peppermint oil, nat., dms. lb. 4.75 - 6.50
Redist., USP, dms. lb. 5.25 - 6.75
Perchloroethylene, dms., c.l., or truckloads, dlvd lb. .13 —
l.c.l., dlvd lb. .14½- —
tanktruck, 1,000 gal., min. dlvd lb. .12 - —
tanks dlvd. lb. .11½- —
Peri acid, dry, frt. alld. lb. 1.35 - —
Paste, frt. alld. lb. 1.30 - —
Persic oil, USP (see Apricot kernel oil).
Peru balsam, dms. lb. 1.25 - 1.50
Petitgrain oil, South American, cns., dms 3.00 - —
Petrolatum, extra amber, dms., c.l., refy lb. .06½- —
l.c.l., dlvd lb. .08¼- —
tanks, refy lb. .04¼- —
cream, dms., c.l., refy lb. .07½- —
l.c.l. dlvd. lb. .09¾- —
tanks, refy lb. .05¼- —
USP, white, lily, dms., c.l., refy. lb. .07⅞- —
l.c.l. dlvd lb. .10⅛- —
tanks, refy lb. .05⅜- —
snow, dms., c.l., refy lb. .08⅜- —
l.c.l., dlvd lb. .10⅝- —
tanks, refy lb. .06⅛- —
yellow, soft, dms., c.l., refy lb. .06½- —
l.c.l., dlvd lb. .08¼- —
tanks, refy lb. .04¼- —
Petroleum pitch (see Asphalt, petroleum).

Petroleum Products

Petroleum product quotations, formerly grouped under one heading, are now listed individually. For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum.

Petroleum sulfonates, oil soluble, 60-62% sulfonic content, non-ret. dms., c.l., works lb. .16½- .18¾
non-ret. dms., l.c.l., works lb. .17½- .19
tanks, works lb. .14½- .17
50-55% sulfonic content, non-ret. dms., c.l., works lb. .16 - —
non-ret. dms., l.c.l., works lb. .17 - —
tanks, works lb. .13 - —
o-Phenetidine, dms., t.l., frt. alld. E lb .91 - —
l.c.l., same basis lb. .93 - —
o-Phenetidine, dms., c.l., frt. alld. lb. 1.05 - —
l.c.l., same basis lb. 1.08 - —
Phenobarbitol, USP, dms., 100-lb. lots lb. 3.25 - —
Phenobarbital-sodium, USP, dms., 100-lb. lots lb. 3.25 - —
Phenol, 90-92% (cresol 8-10%), non-ret. dms., c.l., frt. alld E. of Rockies lb. .17¾- .18
l.c.l., same basis lb. .18¼- .19
tanks, same basis lb. .16 - —
82-84% (cresol 16-18%), non-ret. dms., c.l., same basis lb. .17½- —
l.c.l. same basis lb. .18½- —
tanks, same basis lb. .15½- —
39°C. or above, tar distilled, non-ret. dms., c.l., same basis. lb. .19¼- .19½
l.c.l same basis lb. .19¾- .20½
tanks, same basis lb. .17½- —
USP, syn., dms., c.l., t.l., frt. alld lb. .20 - —
l.c.l. same basis lb. .22 - —
tanks, same basis lb. .18 - —
Phenolphthalein, USP or yellow, bbls. dms., 2,000-lb. lots. lb. 1.15 - —
smaller lots lb. 1.17 - 1.23
Phenothiazine, NF, fib. dms., c.l., frt. adjusted lb. .43 - —
over 2,100 lbs., same basis lb. .45 - —
less than 2,100 lbs., same basis. lb. .47 - —
Phenyl acetate, dms., 100-lb. lots, works lb. .50 - —
Salicylate (see Salol.)
Phenylacetaldehyde, soln., 50%, bots lb 2.40 2.70
100%, bots lb. 4.00 4.65



Basic raw materials for **DETERGENTS**
that leave every glass with a "Crystal Sparkle"

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ENJAY COMPANY, INC., 15 W. 51st STREET, NEW YORK 19, N. Y. Akron, Boston, Chicago, Los Angeles, New Orleans, Tulsa

Phenylacetic acid, pure, cryst., cns.	lb.	1.45	- 1.75
dl-Phenylalanine, dms., works	lb.	27.00	-37.50
1-Phenyl-3-carnetboxy pyrazolone-5, 200-lb fib. dms. dlvd. E	lb.	3.45	—
smaller dms., dlvd. E	lb.	3.80	—
N-Phenyldiethanolamine dms., c.l., dlvd E	lb	40½	—
l.c.l. dlvd E	lb	41½	—
tanks, dlvd E	lb	38½	—
m-Phenylenediamine dms. frt alld.	lb	95	—
o-Phenylenediamine coml., 100 to 1,000 lbs. fib dms. works	lb	1 70	1 80
p-Phenylenediamine refd., tech., dms., works	lb	1 42	-
Phenylethanolamine d m s., s.a., works	lb	75½	—
l.c.l., same basis	lb.	76¼	—
Phenylethyl acetate bots	lb	1.25	1 60
2-Phenylethyl alcohol, extra, dms.	lb.	1.14	- 1.45
Standard, dms	lb.	1.10	- 1.60
Phenylglycolic acid (see Mandelic acid).			
Phenylhydrazine base CP bots	lb	3 00	3.09
Hydrochloride coml kgs works	lb	1 75	—
purif bots works	lb	5 17	—
1-Phenyl-3-methyl pyrazolone-5 250-lb lots, dlvd E	lb	1 80	—
smaller lots, dlivd E	lb	2 10	—
Phenylethylphenyl acetate bots	lb	4 15	4.35
o-Phenylphenol dms l c l works	lb	42	44
p-Phenylphenol bgs. c.l works	lb	37	—
l.c.l. works	lb	41½	—
Philippine copal gum, pale, chips, bgs	lb.	.25½-	.28
Pale, nubs, bgs	lb.	.32½-	.36
seeds, bgs	lb.	.20	Nom.
sorts, bgs	lb.	.23½-	.26
Phlorogiucinol coml fib dms. works	lb		
CP, bots. works	lb.	17.75	- —
tech fib drums works	lb	10 45	—
Phloxin red toner (see Eosin red toner).			
Phosphate defluorinated (see under D-			
Phosphate rock, Curacao, Atlantic ports, New Orleans	ton.	48.00	- —
Florida land pebble run-of mine, washed dried un ground bulk c.l. mines 68-66% b p.l. bulk c.l. mines	long-ton	5.115	—
Phosphate rock, Florida, land pebble, run of mine, washed, dried, unground, bulk, c.l., mines, 70-68%, b.p.l., c.l., same basis	long-ton.	5.515	- —
72-70% b p.l c.l. same basis	long-ton	6.165	—
75-74% b p.l. c.l. same basis	long-ton.	7 165	—
77-76%, b.p.l. c.l., same basis	long-ton	7 165	- —

The Florida prices (above) are based on fuel oil at $2 82 per bbl. and labor at $1 43 Re cent oil advance currently absorbed

Phosphoric acid, food grade, 75%, cbys., c.l., works, E., frt. equald	100 lbs.	6.75	- —
cbys., l.c.l., same basis	100 lbs.	7.00	- 7.50
tanks, works	100 lbs.	5.35	- —
80%, cbys., c.l., frt. alld	100 lbs.	7.60	- —
cbys., l.c.l., works	100 lbs.	7.85	- 9.10
tanks, works	100 lbs.	5.75	- —
NF, 85%, cbys., c.l., works	lb.	.0825-	—
cbys., l.c.l., works	lb.	.0850-	.0875
tanks, works	lb.	.0640-	—
Phosphorus amorph red dms. t.l. works	lb	46	—
smaller lots works	lb	49	50
white (yellow), solid, dms., c.l., works, frt. equald	lb.	.20	.20½
l.c.l. works frt equald	lb.	21½	-
tanks works frt equald	lb	19	—
Oxychloride, dms., c.l., works	lb.	.14	- —
l.c.l. works	lb.	.15	- —
tanks works	lb	12½	-
Pentasulfide, solid, dms., c.l., works	lb.	.11½	—
l.c.l. works	lb	12½	—
Phosphorus pentoxide, dms., c.l., works	lb.	.1395-	.1450
l.c.l., works	lb.	.1695	1730
Sesquisulfide tins cs. c.l. works	lb	38	—
l.c.l. works	lb.	39	40
Trichloride, dms., c.l., works	lb.	.14	- —
l.c.l. works	lb	15	- —
tankcars works	lb	12½	—
Phthalic anhydride bgs., c.l., works, frt. equald	lb	21	- —
l.c.l., same basis	lb.	22	- —
tanks, same basis	lb	20½	- —
Phthalimide 97% 98% dms., frt equald	lb	65	—

Phthalocyanine blue, full strength, bbls., dlvd. N. of Tenn. and N. C., E. of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis ..... lb. 3.45 - —

Resinated, bbls., same basis ... lb. 3.00 - —

Water dispersable, bbls., same basis lb. 1.69 - —

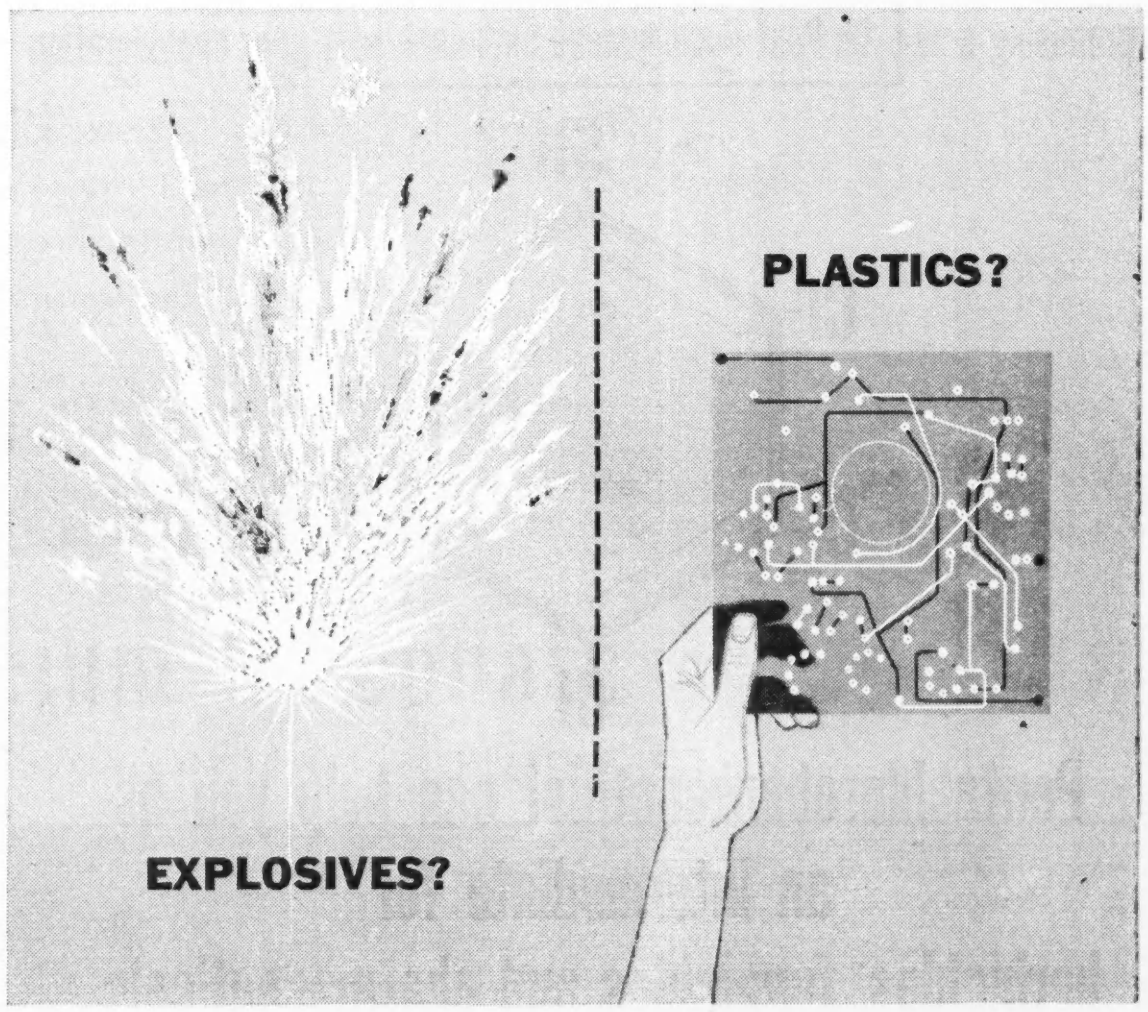
Phthalocyanine blue dlvd. prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equald. with Chicago.

Phthalocyanine green toner, bbls., works	lb.	3.95	- —
Resinated, bbls	lb.	3.50	- —
Water dispersable, bbls	lb.	1.71	- —
Phthalylsulfacetamide 1,000-lb lots or more	lb	5 00	—
NF	lb	5 20	—
a-Picoline, dms., c.l., works, frt. equald	lb.	.43	- .43½
l.c.l. works, frt. equald	lb.	.44	—
tanks, same basis	lb.	415	422
b,g-Picoline 5°C. dms. c.l. works	lb	32½	—
l.c.l works	lb	33	—
g-Picoline 98% dms works	lb	2 00	—
Picric acid, NF, bbls	lb.	.85	- —
Tech., bbls	lb.	.44	- —
Pigment green B, kgs	lb.	1.35	- —
Pilocarpine hydrochloride, USP bots	oz	4.75	5.25
Nitrate USP bots. vials	oz	4.65	4 75
Pimento, Jamaican, bgs	lb	72	—
Mexican, bgs	lb.	.36	—
Pimento berry oil, NF, dms	lb.	5.50	- —
Pimento leaf oil, cns	lb.	2.00	- 2.60
Pine oil, dest.-dist., dms., l.c.l., works	lb.	.12¼-	—
dms., l.c.l., ex whse New York.	lb.	.14¼-	—
Steam-dist., dms., ex whse. New York	lb.	.176 -	—
dms., dlvd.	lb.	.179 -	—
Pineneedle oil, Siberian (see Abies Siberica oil).			
Pinetar oil, com., dms., c.l., works	lb.	.0561-	—
dms., l.c.l., works	lb.	.0634-	—
dms., l.c.l., ex whse. New York.	lb.	.0745-	—
tanks, works	lb.	.046 -	—
Pinetar oil, rectified, NF, dms., incl., l.c.l., works, south	gal.	1.05	- —
dms., incl., l.c.l., ex whse., New York	gal.	1.15	- —
Refd., dms., incl., l.c.l., works,	gal.	.92	- —
dms., incl., l.c.l., ex whse., New York	gal.	1.02	- —
Pink root, bls	lb	2.50	- —
Piperazine, 95% or better, dms., c.l., minimum frt. alld	lb.	2.84	- —
l.c.l., same basis	lb.	2.88	- —
Citrate, 100 lb. lots	lb.	2.00	- —
Hexahydrate, French Codex, bots., 100 lb. lots	lb.	1.60	- —
Piperidine dist dms frt equald	lb	2.60	2.70
Piperonyl butoxide dms dlvd E	lb	4.50	5.05
Cyclonene, dms. dlvd. E	lb.	3.70	- 4.25

Pitches

Pitch quotations, formerly grouped under one heading, are now listed individually. For example, prices on Pitch, soybean, may be found in the S's under Soybean pitch.

Plaster of Paris (see Gypsum)			
Platinum metal, works	oz.	98.00	101.00
Pleurisy root bls	lb	45	50
Podophyllum resin NF. dms	lb	15 60	16 10
Poke root, bls	lb.	.19	.22
Pontianak copal gum, chips, bgs,	lb.	.26	- —
Nubs, bgs	lb.	.37	- .40
Polymyxin, bulk, bots., dms., 50 billion units or more, 1,000,000 units.		.52	- —
25-50 billion units 1,000,000 units.		.54	- —
1-25 billion units 1,000,000 units.		.56	- —
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works	lb.	.41	- —
10,000-20,000-lb. lots, works.	lb.	.43	- —
smaller lots, works	lb.	.46	- .48
Polyoxyethylene sorbitan tristearate, dms., 20,000-lb. lots, works	lb.	.41	- —
10,000-20,000-lb. lots, works.	lb.	.43	- —
smaller lots works	lb	46	.48
Poppy seed, Argentine bgs	lb	.24	- —
Dutch, bgs	lb.	.28	- —
Iranian bgs	lb	14½	.15
Polish, bgs	lb.	.27½-	—
Turkish bgs	lb.	.24	- —
Potash caustic reg flake 88-92% dms. c.l., works	100 lbs	9.15	- —
l.c.l., works	100 lbs	10.20	- —
liq. 45% basis dms c.l. works	100 lbs	4.25	- —
l.c.l. same basis	100 lbs	5.05	- —
tanks same basis	100 lbs	3.70	- —
solid, 88-92%, dms., c.l., works.	100 lbs.	8.70	- —
l.c.l. works	100 lbs	9.75	- —
Potassium acetate NF dms	lb	31	38
Bicarbonate USP gran dms	lb	22	—
powd dms	lb	24	—
Bichromate gran bgs., c.l., t.l., works	lb	18	—
l.c.l. works	lb	18½	19¼
Potassium bichromate in dms. ½c higher.			
Bitartrate NF dom. gran or powd bbls 5,000 lbs. 1 ship't	lb.	40½	—
dms. c.l	lb	40	—
smaller lots	lb	41	43
imp., kgs	lb.	.33½-	.37
Bromate, dms., 1,000-lb. lots or more, works	lb.	.50	- —
smaller lots, works	lb.	.52	- .62
Bromide, USP, gran., bbls., kgs.	lb.	.39	- .40
Carbonate, NF, gran., bbls., dms.	lb.	.20	- —
powd bbls dms	lb	21	22
tech. calcined, bbls. c.l. works.	100 lbs.	9.00	—
c.l. same basis	100 lbs	10.05	—
hydrated 83-85% bbls., c.l. works	100 lbs	7.60	—
l.c.l. works	100 lbs	8.65	—
Potassium chlorate, cryst., dms., c.l., works	lb.	.11¼-	—
l.c.l. works	lb.	.11½	12¼
powd. dms., c.l., works	lb.	.11¾	—
l.c.l. works	lb.	.12	.13
NF, gran 25-lb metal dms	lb.	.36	—



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But whether *you* make explosives, weed killers, oil additives, plasticizers, dyes, disinfectants, or pharmaceuticals, you can count on Reichhold as a dependable source for top quality phenol.

With RCI PHENOL you can be sure of quality control because *Reichhold not only sells its phenol but uses it.* RCI produces phenolic resins for everything from high pressure laminates to plywood glues.

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Pentachlorophenol • Sulfuric Acid

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RCI BUILDING, WHITE PLAINS, N. Y.

Creative Chemistry
Your Partner in Progress RCI

Potassium Chloride—Rapeseed Oil

Potassium chloride, agricultural (see Potassium muriate).
indust 99.9% KCl bulk, c.l., works ton 29.00 - —
bgs., c.l., works ton 33.50 - —
99.3% KCl bulk c.l. works ton 27.00 - —
bgs., c.l., works ton 31.50 - —
USP cryst., dms lb .21 - .23
gran., dms lb .15 - .17
powd dms lb .24 - .26
Chromate tech. bgs lb .50 - .50½
Citrate, USP, gran. dms lb .43 - —
powd. dms lb .40½ - 41½
Cyanide dms. 20,000-lb lots or more works lb .45 - —
2,000-19,999-lb lots works lb .455 - —
smaller lots works lb .465 - —
Dichromate (see Potassium bichromate).
Ferricyanide, dms. ton lots works lb. .50 - —
smaller lots, works lb .65 - —
Ferrocyanide, bgs. ton lots lb .23 - —
smaller lots lb .23½ - —
Fluoborate fib dms. c.l. works lb .30 - —
c.l. works lb .31 - —
Fluoride, dms., works lb. .37 - .38
Gluconate, dms lb. 1.62 - —
Potassium guaiacolsulfonate, NF, dms lb. 2.10 - 2.30
Hydroxide, tech (see Potash caustic)
USP pellets 100-lb dms 1 to 100-dm. lots lb. .33½ - .38

Potassium hyperphosphite, NF, fib. dms., 1,000-lb. lots lb. 1.38 - —
Iodide, dms lb 1.90 1.95
Manure salt, 22% K_2O, bulk, c.l., works unit-ton. .17 - .1765
Metabisulfite, gran., dms lb .20 - .21
powd., dms lb .25 —
Muriate, standard and granular, 59-63% K_2O, bulk, c.l., works, base price unit-ton. .36 - —
July forward unit-ton .38 - —
granular, 60-63% K_2O, bgs. c.l. works base price ton 26.25 - —
July forward ton 27.45 - —
Nitrate, NF, cryst. bbls., 20-ton lots 100 lbs. 16.50 - —
smaller lots 100 lbs 17.50 -18.00
Nitrate, gran., bgs., 20-ton lots. 100 lbs. 9.25 - —
smaller lots 100 lbs. 10.50 -11.00
powd., bgs., 20-ton lots 100 lbs. 10.25 - —
smaller lots 100 lbs. 11.50 -12.00
Oxalate, neutral, tech., fine grs., bbls., dms lb .30 - .31
Pentaborate, gran. bgs., c.l., works. ton 191.50 - —
dms. ton lots ex whse ton 302.00 - —
smaller lots ex whse ton 307.00 - —
Powdered potassium pentaborate $10.25 per ton higher
Potassium perchlorate, dms., c.l., works lb. .18½ - —
l.c.l., works lb 19 20

Potassium permanganate, coml., kgs., works lb. .26 - .29
USP, dms., works lb. .29¼ - .31
Persulfate, dms., c.l., works lb. .17½ - —
l.c.l., works lb. .18 - .21
Pyrophosphate, tetrabasic, dms., works lb. .15½ - .18½
Prussiate red (see Potassium Ferrocyanide).
yellow (see Potassium Ferrocyanide).
Silicate, glass bgs., c.l. works. 100 lbs. 17.00 -17.30
t.c.l. works 100 lbs. 17.80 - —
soln., clarif. 29° Be, 1:2.5, dms., c.l. works 100 lbs. 5.80 - —
t.c.l., 5 dms or more works 100-lbs 6.55 6.95
tanks, works 100-lbs 5.45 - —
electrical grade, 29° Be. 1:2.0, dms., c.l., works 100 lbs. 6.50 - —
t.c.l. 5 dms or more works 100 lbs 7.25 - 7.65
tanks, works 100 lbs 6.15 - —
electrical grade, 40.5° Be, 1:2.1, dms., c.l., works 100 lbs. 6.45 - —
t.c.l. 5 dms or more works 100 lbs 7.20 7.60
tanks, works 100 lbs 6.10 - —
Silicofluoride, bgs., works lb .09½ - .10
Potassium silicofluoride in drums 0.4c per lb higher
Potassium stannate, dms., frt. alld. E lb. .776 - .848
Sulfate, agricultural, 50% K_2O, bulk, works base price. unit-ton. .64 - —
July forward unit-ton 67 - —
Sulfate, NF VII, cryst., dms lb. .31 - .33
gran. dms lb 18½ —
powd., dms lb. .16 - .17

Potassium sulfocyanate (see Potassium thiocyanate).
Thiocyanate, NF, cryst., dms., works. lb. .84 - .94
tech., dms., works lb. .77 - .79
Titanate, ctns., c.l., works lb. .16¼ - —
5-ton lots, works lb. .16½ - —
1-ton lot or less, works lb. .16¾ - —
Toluene sulfonate, dms., c.l., or t.l., works lb. .42 - —
t.c.l., works lb. .46 - —
Potassium-magnesium sulfate, bulk, works, basis 40% K_2SO_4, 18% MgO base price ton. 13.45 - —
July forward ton. 14.00 - —
Potassium-sodium tartrate, NF, gran. powd., dms., c.l lb. .42½ - —
5,000-lb. lots lb. .43 - —
smaller lots lb. .43½ - .49
Potassium-titanium fluoride, fib. dms, works lb. .39 - .40
Potassium-zirconium fluoride, fib. dms, c.l., works lb. .50 - —
t.c.l., works lb. .52½ - .55
Pregnenolone, bots. gram .45 - —
Acetate, bots. gram .40 —
Procaine hydrochloride, USP dms., 1,000-lb lots, frt. alld lb 2.83 - —
100-500-lb. lots lb 2.95 3.15
Progesterone USP bots., 100 gram lots gram .50 - —
Acetate bots gram .70 - —
Propane, indust. tanks, group 3 gal. .05 - —
N. Y. Harbor gal. .093 —
Propionic acid, syn., pure, dms., c.l., works lb. .22¾ - —
dms., l.c.l., works lb. .23¾ - —
tanks, works lb. .20¾ - —
n-Propyl acetate, dms., c.l., dlvd. lb. .14¼ - —
l.c.l., dlvd lb. .15¼ - —
tanks, dlvd lb. .11¾ - —
n-Propyl alcohol, dms., c.l., dlvd lb. .13½ - —
Dms., l.c.l., dlvd lb. .14½ - —
Tanks, dlvd lb. .11 - —
Gallate dms. 100 to 2,000-lb lots, works lb 3.90 4.40
p-Hydroxybenzoate, USP, dms lb 2.30 2.40
Propyl thiouracil bots., 50-kilo lots or more kilo 55.00 —
smaller lots kilo 55.10 55.30
Propylene dichloride, consumers, dms., c.l., dlvd E lb. .0845 - —
l.c.l., same basis lb. .0950 - —
tanks same basis lb .07 —
Propylene dichloride prices in West 1c higher dlvd. on same basis.
Glycol, indust. dms. c.l., dlvd. E. lb. .16 - —
t.c.l. same basis lb .17 - —
tanks, same basis lb 13½ —
USP, dms., c.l., dlvd E lb .18 - —
t.c.l. same basis lb .19 - —
tanks, same basis lb 15½ —
Methyl ether dms., c.l., dlvd lb .20 - —
t.c.l. same basis lb .21 - —
tanks, same basis lb .18½ - —
Propylene oxide, dms., c.l., dlvd. E. lb. .18 - —
t.c.l. dlvd. E lb. .19 - —
tanks, dlvd E lb. .16½ - —
Psyllium seed, black, bgs lb. .28 - .30
blonde bgs lb .18 —
husks bgs lb .40 —
Pumice, dom., grd., coarse to fine, 0 ½ 1 1½ 2 3 bgs. ton lots lb 03½ .04¼
smaller lots lb 03¾ 04½
imp., Italian, silk-screen, coarse, bgs., ton lots lb 06½ - —
fine, bgs ton lots lb .04 - —
sun dried coarse, bgs ton 58.00 - —
fine, bgs ton. No Prices
Pumpkin seed bgs lb 25 .26
Pyrethrin syn (see Allethrin)
Pyrethrum flowers fine grd. 0.9% pyrethrins, bbls. works lb 45 —
powd. 1.3% pyrethrins, bbls., works lb 65 —
liq 20-1 basis (2 grams pyrethrins per 100cc odorless base), dms., works gal. 8.75 8.85
100-1 basis (10 grams pyrethrins per 100cc odorless base) dms. works gal. 41.75 42.75
oleoresin dewaxed 20% dms. works lb 10.00 —
purif. 20% dms. works lb 10.00 10.10
Pyridine, denaturing, dms., c.l., works and frt equald gal .2.77 - —
t.c.l., same basis gal 2.80 - —
refd. 2° non ref. dms. l.c.l., same basis lb 75 - —
Pyridoxine hydrochloride, bots. 100-gram lots gram. .29½ - —
Pyrites, Canadian, 48-50% S, works. long-ton. 5.00 - 6.00
Pyrocatechol (see Catechol)
Pyrogallic acid, NF (see Pyrogallol).
Pyrogallic acid, tech., bbls. lb. 3.17 - 3.25
Pyrogallol, NF, 100 lb. dms lb. 3.50 - —
Pyroxylin scrap, ungrd., amber, dms., works lb 20 —
black, dms., works lb 12 —
mixed mottled c/ms. works lb 13 —
shavings, amber cs. works lb No stocks.
mixed colors, dms., works lb .11 —
white, china, ivory, dms., works lb .16 —
dense opaque dms. works. lb. 12 .15
translucent pastels, cs. works. lb 14 —
colors, dms., works lb. .16 - —
USP bots lb 9.50 —

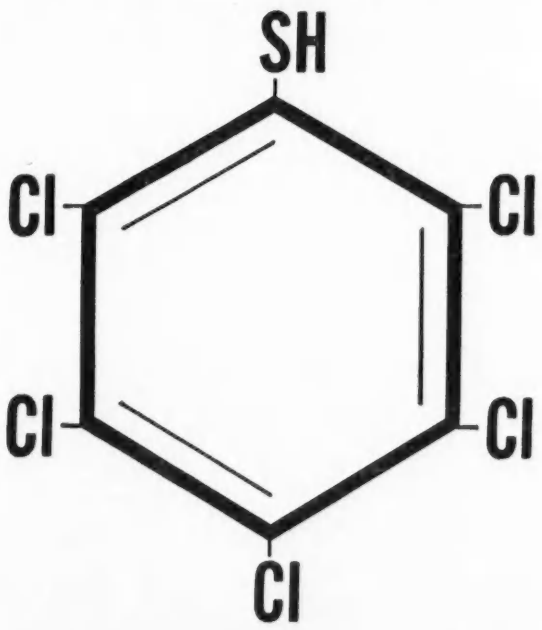
Q

Quassia chips lb. .17 —
Quebracho extract, clarif., grd., 70% tannin bgs., works. lb. .16½ - .17
liq., 35% tannin, bbls., works. lb. .08¼ - .08½
solid, clarif., 64% tannin, bgs., c.l., ex-dock, duty extra lb. .107429 —
ord., 63% tannin, bgs., c.l., same basis lb. .098035 —
Quercitron extract, cryst. No 1, bbls. t.c.l lb 40 —
liq. No 1 bbls t.c.l lb 19 —
Quicksilver (see Mercury metal)
Quince seed bgs lb 2.00 Nom
Quinidine sulfate USP cns., 100-oz. lots oz. .73 .75
Quinine, NF, cns. 100-oz lots oz. .54 —
Bisulfate USP cns., 100-oz lots. oz. .37½ —
Hydrochloride cns. 100-oz. lots oz. .35 .47½
Sulfate USP, cns. 100-oz lots oz. .29 .35
Quinoline dms. c.l. frt equald lb 50¾ —
l.c.l., same basis lb 51¼ —
tanks, same basis lb 50 —

R

R salt, paste, dms., frt. alld., 100% basis lb 88 —
powd frt alld 100% basis lb 98 —
Rapeseed oil, tanks lb. .18¾ - —

A promising new **Du Pont Development Chemical** for your consideration



Pentachlorobenzenethiol* can help you as an intermediate for herbicides, fungicides and pharmaceuticals

A combination of the reactive thiol group and chlorine in one molecule makes Du Pont Pentachlorobenzenethiol a potentially useful intermediate for a number of important products—particularly in the agricultural chemical and pharmaceutical fields.

REACTIONS: Pentachlorobenzenethiol reacts as a typical aromatic thiol with: 1. alkali and alkaline earth hydroxides to form water-soluble metallic salts; 2. various oxidizing agents such as hydrogen peroxide, potassium ferricyanide and sulfur dichloride to form mono, di and polysulfides; 3. acid chlorides or anhydrides to form thiol esters; 4. carbonyl compounds to form thioacetals and thioketals; 5. isocyanates to form thiol urethanes.

JUST DROP US A LINE and we'll gladly send our product information on pentachlorobenzenethiol—now available in development quantities. We'll also be glad to send a test sample for your development work if you request it. E. I. du Pont de Nemours & Co. (Inc.), Organic Chemicals Department, Chemicals Division, Wilmington 98, Delaware.

*Technical Grade

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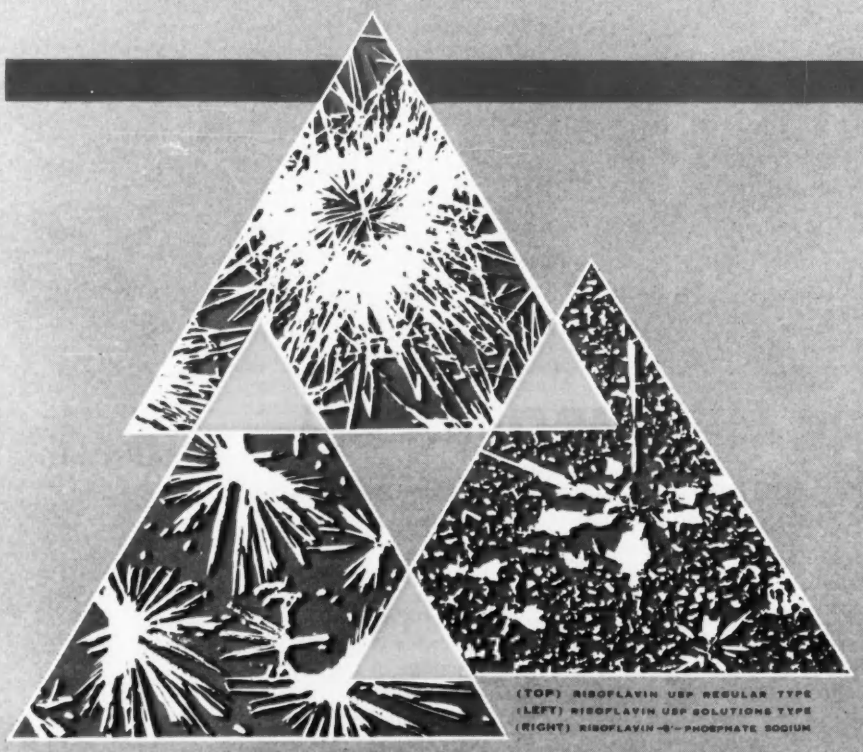
BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY

ORGANIC CHEMICALS DEPARTMENT



(TOP) RIBOFLAVIN USP REGULAR TYPE
(LEFT) RIBOFLAVIN USP SOLUTIONS TYPE
(RIGHT) RIBOFLAVIN-5'-PHOSPHATE SODIUM

VITAMIN B_2 COMES RIGHT FROM ROCHE

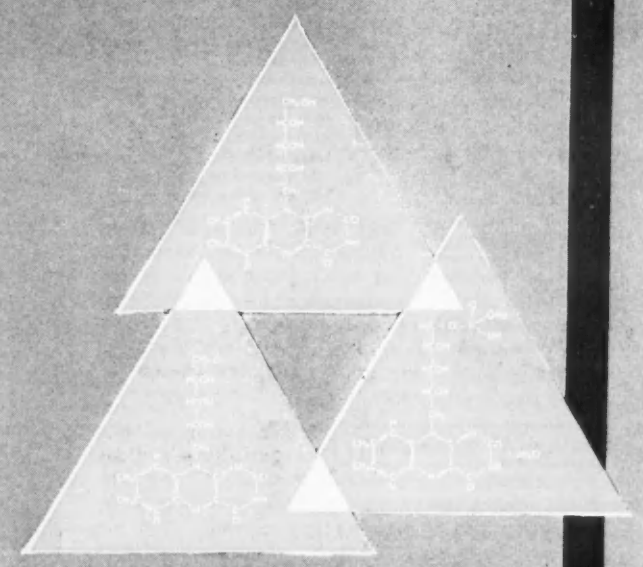
Various types are available to meet the most exacting demands in the pharmaceutical field for tablets, capsules, dietary supplements, liquid preparations; and in the food industry for enrichment premixes and breakfast cereals. Roche has the type of riboflavin that is right for you, whenever you want it—"by the tons."

Roche originated riboflavin-5'-phosphate sodium for all solutions demanding rapid, high solubility, and stability. Among pharmaceutical manufacturers it is preferred for injectable solutions, elixirs, and multivitamin drops. A better, less bitter taste than U.S.P. riboflavin makes it advantageous for chewable tablets and other products likely to be held in the mouth. In the food field it is preferred for breakfast cereals.

The Roche synthesis achieves quality standards that meet, or even exceed the rigid U.S.P. riboflavin requirements. This assurance is insurance for you.

Trust Roche resources for a constant, unlimited supply of riboflavin. Trust Roche for quick, sure service.

ORDER *right* . . . ORDER *from Roche*



VITAMIN DIVISION

HOFFMANN-LA ROCHE INC.

NUTLEY 10, NEW JERSEY, NUTLEY 2-5000 • IN NEW YORK: OXFORD 5-1400

(Illustration represents actual crystals under high magnification, using shadow technique.)

Important Riboflavin Development

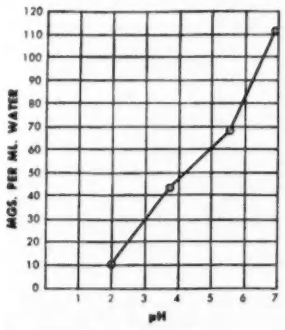
✓ Higher solubility ✓ Better taste

✓ No solubilizer needed ✓ Commercial production

USE ROCHE RIBOFLAVIN 5′-PHOSPHATE SODIUM

higher solubility

Now you can make clear solutions with a concentration of 30 mg. or higher per ml. of water when you use the new Roche riboflavin-5′-phosphate sodium. No longer do you need to use solubilizers and special techniques to achieve a satisfactory solution. Remember the trouble you had in getiing a solution of even 2 mg. of riboflavin per ml.? Those days are now past.



SOLUBILITY of Roche riboflavin-5′-phosphate sodium in water at different pH levels; room temperature.

These data show that solubility of Roche B_2 phosphate sodium depends on hydrogen ion concentration in water. It is useful to note that the solubility of riboflavin U.S.P. (approximately 0.12 mg. per ml.) inserted on graph would fall just above the base line.

specifications Tests show that B_2-5′ (M.W. 514.4) has the full theoretical activity on the molecular basis of riboflavin (M.W. 376.36). Theoretically one gram of the phosphate is equivalent to 0.73 grams of riboflavin. The Roche product contains small amounts of moisture, disodium salt, diphosphate ester and unesterified riboflavin. It has a riboflavin activity of 70-73% by weight.

biological availability Roche riboflavin-5′-phosphate sodium has immediate biological activity because it is identical with the natural flavin mononucleotide occurring in the "yellow" respiratory tissue enzyme system.

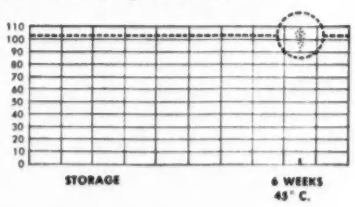
better taste Roche riboflavin-5′-phosphate sodium does not have the intensely bitter taste of riboflavin itself. It is more palatable in high concentrations. The different taste is of definite advantage in oral preparations.

solubility—taste demonstration You can prove to yourself, easily and quickly, the solubility-taste advantages of Roche riboflavin-5′-phosphate sodium with the Roche demonstration kit. Ask your Roche representative to show it to you. Or we'll be glad to send one, without charge, at your request.

cost comparison Even though the cost of Roche B_2-5′ is somewhat higher than regular riboflavin, its use can result in actual savings. You eliminate expensive solubilizers and unnecessarily large amounts of niacinamide. You reduce or eliminate costly complaints and returns. You are able to make manufacturing economies.

stability

Chart demonstrates stability of Roche product in B-complex parenteral solutions with and without vitamin C over wide potency range.



uses The new riboflavin-5′-phosphate sodium, probably the most important riboflavin development since Roche introduced the vitamin commercially in 1941, is specially designed for use in manufacturing:

- **pharmaceutical** vitamin injectable solutions, drops and elixirs, gelatin capsules and chewable tablets
- **food enrichment,** especially if by liquid application

CALL **ROCHE** FOR·VITAMINS

VITAMIN DIVISION

HOFFMANN-LA ROCHE INC.

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Pacific Coast distributor: L. H. BUTCHER COMPANY
San Francisco • Los Angeles • Seattle • Portland • Salt Lake City

In Canada: Hoffmann-La Roche Ltd.
286 St. Paul Street, West; Montreal, Quebec

Rauwolfia serpentina root, powd., bbls., dms lb 1.75 - —
Red, carmine, No. 40 (see Carmine).
Red oil (see Oleic acid).

Red Pigments

Red pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner.

Red precipitate (see Mercuric oxide red)
Red saunders NF powd. bbls lb .35 .40
Reserpine, cryst., bots. gram 2.40 - —
Resorcinol, tech grade, dms., c.l., works, frt equald lb 77½ - —
c.l., same basis lb 78½ - —
USP, dms., works lb 2.75 - —
powd. dms., works lb 2.95 - —
Monoacetate NF dms lb 3.00 3.25
Rhatany root bgs lb .15 .16
Rhodamine red toner, molybdated, PMA, kgs lb 5.80 - —
Tungstated, PTMA, works, kgs. lb 6.60 - —
Rhodinol 5-lb cans lb 32.00 - 36.00
Rhubarb root, india, whole, bgs. lb .30 - —
powd., bbls lb .38 - —
Riboflavin USP, bots., dlvd kilo 65.00 - —
readily soluble, bots., dlvd kilo 130.00 - —
5' phosphate-sodium, bots., 100-kilo lots or more kilo 125.00 - —
Rice bran oil, clarif., dms., l.c.l. lb .18 Nom.
tanks, dlvd, E lb .15 - .15½
Ricinoleic acid (see Castor oil acids, split).
Rochelle salt (see Potassium-sodium tartrate).
Roofing pitch (see Coaltar pitch, roofing)
Rose oil, nat., Bulgarian, bots oz 70.00 - —
Rosemary oil, Spanish, NF, cns., dms lb .70 - 1.00
tech., cns., dms. lb .50 - .70
Rosin gum and wood (see Naval Stores in Protective Coatings market)
Rotenone, fib dms, works unit-lb .12 - —
resin 25-45% fib dms works, unit-lb .12 - —
Rottenstone ngs 5-ton lots exwhse lb .03¾ - —
ton lots, same basis lb .04¼ - —
Rubber solvent, petroleum, tanks, Calif. ex tax, San Francisco gal .178 - —
tanks, east coast, N. J., N. Y. gal .19 - —
tanks, group 3 gal .13875 - —
Rue oil, bots. lb 2.00 - 2.50
Rutin, NF fib, dms., 10 kilo lots, kilo 17.00 - —
5 kilo lots kilo 17.50 - —
1 kilo kilo 18.50 - —
Ryania 100% powd. bgs., works lb .22 - —
l.c.l. same basis lb .24 - —

S

S acid, bbls., works lb 3.25 - —
Sabadilla seed powd., bbls lb .49 .49½
activated ground with lime, bbls. lb .30 .32
Saccharin USP cryst. soluble, dms., 1000-lb lots lb 1.60 —
smaller lots lb 1.70 1.80
powd., soluble insoluble, dms., 1,000-lb. lots lb 1.65 - —
smaller lots lb 1.75 1.95
Calcium fib dms 1,000-lb. lots, works lb 2.50 —
Safflower oil, dms., N. Y. lb .1785 - .1835
Tanks, same basis lb .1585 - —
Saffron Spanish USP tins lb 45.00 —
Safrol dms lb .90 1.05
Sage, Cretan bgs lb .11 —
Dalmatian bgs lb .44 —
Italian lb .26 Nom.
Sage oil, clary, bots. lb 18.75 - 19.00
Dalmatian, cns. lb 4.75 - —
Spanish, cns. lb 1.20 - 1.45
Sage flour raw bgs lb .07 .07¼
refd. bgs lb .08½ - .09
Sal soda (see Soda sal).
Salicylamide, 100-lb. dms. lb 1.05 - 1.15
Salicylic acid, crude, fib, dms., c.l., frt. alld. lb .35 - —
fib, dms., l.c.l., frt. alld. on 100 lbs. or more lb .36 - —
Sublimed, tech., fib, dms., c.l., dlvd. lb .37 - —
fib dms., l.c.l., dlvd lb .41 - —
USP, cryst., fib, dms lb .50 - —
powd., fib, dms lb .57 - —
Salol, NF, gran., bbls., kgs lb 1.20 - —
Powdered salol 25c higher
Salt, rock, paper bgs., c.l. 100 lbs. 1.07 - —
table vacuum common fine, paper bgs., c.l. 100 lbs. 1.32 - —
Saltcake dom. bulk, works, 100% Na_2SO_4 basis ton 28.00 - —
Saltpeter (see Potassium nitrate).
Sandalwood East indies chips bgs. .65 - .66
powd., fib dms lb .75 - .76
Sandalwood oil, cns. lb 16.00 - —
Sardine oil, crude, tanks, Pacific Coast lb .08½ - .08¾
Sassafras oil, artif., dms. lb .50 - .62
Nat., dom., dms. lb 1.45 - 2.10
Sassafras oil, Brazilian (see Ocotea Cymbarum oil).
Savin oil, cns. lb 2.75 - —
Savory oil, cns. lb 4.25 - —
Schaeffer's salt, paste, dms., frt. alld. 100% basis lb .95 - —
powd bgs., frt alld. 100% basis lb .95 - —
Scopolamine hydrobromide, USP, bots oz 13.50 - 16.50
Sebacic acid, purif., dms., c.l., works lb .64 - —
dms., l.c.l., works lb .66 - .70
Seidlitz mixture, bbls., 5,000-lb. lots lb .30½ - —
smaller lots lb .31 - .32
Selenium powd., 99½%, dms., dlvd. lb 12.00 - —
Senega root, bls. lb 2.90 - 3.00
Senna leaves, Alex. whole and half, bls lb .19 —
siftings lb .17 - —
Tinnevelly, No. 1, bls. lb .16 - .18
No 2 bls. lb .13 .15
No. 3, bls lb .11 - .13
powdered, bbls., bxs. lb .15 - —
pods bls. lb .14 - —
Serpentaria, root, bls. lb 7.50 - —
Sesame oil, USP, dms. lb .38 - .39
Sesame seed, Egyptian, hulled, bgs. lb .22½ - —
nat., bgs. lb .17 - —
Nicaragua, hulled, shipt., bgs. lb .25 - —
nat., bgs lb .16½ - —
Salvadorian, natural, bgs. lb .21½ - —
Indian, natural, bgs. lb N.P.

Shellac, bleached, bonedry, bgs., 2,500-lb. lots lb .52 - —
bbls., 1,500-lb. lots lb .53 - —
kgs., 1,500-lb. lots lb .54 - —
refd., bgs., 1,500-lb. lots lb .62 - —
bbls., 1,500-lb lots lb .63 - —
kgs., 1,500-lb. lots lb .64 - —
Bonedry shellac prices for less than 1,500 lb. lots 1c. per lb. higher for all packages.
Shellac, lemon, No. 1, bgs., 10-bg. lots lb .41 - .42
No. 2, bgs., 10-bg. lots lb .39 - —
Superfine, bgs., 10-bg. lots lb .38 - —
TN, bgs., 10-bg. lots lb .37 Nom.
Shellac in 1 to 10-bg. lots 1c. per lb. more.
Shingle stain oil, tar distillate, dms., c.l., works gal .35 - —
dms., l.c.l., works gal .44 - —
tanks, works gal .23 - —
Sienna pigment, burnt, paper bgs., c.l., works lb .06¼ - .17¼
paper bgs., l.c.l., works lb .06½ - .17½
Raw, paper bgs., c.l., works lb .06¼ - .16¼
paper bgs., l.c.l., works lb .06½ - .16½
Silica, amorph., dry-grd. 325 mesh, bgs., c.l., works ton 25.00 —
l.c.l. works, exwhse ton 45.00 - 55.00
hard-quartz, 99½%, 325 mesh, bgs., c.l., works ton 20.00 —
l.c.l., works ton 25.00 - 30.00
140 mesh bgs. c.l., works ton 15.00 —
l.c.l., works ton 20.00 —
Silicon tetrachloride, tech., dms., c.l., works lb .18 - —
l.c.l. works lb .22 .30½
tanks, works lb .17 —

Silver bullion, ingots, cs. Troy oz .91⅜ - —
Cyanide fib dms., 2,500-oz lots. oz .87 —
1,000-oz. lots oz .87⅜ - —
500-oz. lots oz .87½ - —
100-oz. lots oz .87¾ - —
Nitrate, CP cryst. bots., 2,500-oz. lots oz .62⅜ - —
1,000-oz. lots oz .63½ - —
500-oz. lots oz .64⅛ - —
250-oz. lots oz .64⅝ - —
USP granular silver nitrate 4c per oz higher.
Proteinate mild USP, bots., dms., 1,000-oz. lots oz 1.15 - —
strong NF bots. dms. 1,000-oz. lots oz 1.10 - —
Snakeroot oil, Canada, cns. lb No stocks.
Soapbark, whole, bls lb .38 .40
crushed bls. bbls lb .45 —
powd. bbls lb .45 —
Soda ash, dense 58%, paper bgs., c.l., works 100 lbs. 1.90 - —
l.c.l. stock points 100 lbs. 3.00 - 4.77
bulk, c.l., works 100 lbs. 1.60 - —
light, 58%, paper bgs., c.l., works 100 lbs. 1.85 - —
l.c.l. stock points 100 lbs. 3.95 - 4.72
bulk, c.l., works 100 lbs. 1.55 - —
Soda, caustic, flake, 76% dms., c.l., works, frt. equald 100 lbs. 4.70 - —
liq., 50%, sellers tanks, works, dry basis 100 lbs. 2.90 - —
rayon type, sellers, tanks, works, dry basis 100 lbs. 2.90 - 3.00
Soda, caustic, liq., 50%, rayon-type, sellers' tanks, works, dry basis. 100 lbs. 3.00 - 3.10
73%, sellers, tanks, works, dry basis 100 lbs. 3.00 - —
Soda, caustic, solid, 76%, dms., c.l., works 100 lbs. 4.30 - —
Sal. conc., bgs., c.l. works 100 lbs 2.50 - —
smaller lots, works 100 lbs 2.80 - —
Sodium acetate anhyd ogs. c.l. frt equald lb .13 —
dms., l.c.l., frt equald lb .13¾ - —
NF 60% gran dms., c.l., works lb 14 - —
l.c.l. works lb 15½ - —
Alginate NF white powd. dms., 300 lbs or more lb .93 - —
p-Aminobenzoate, dms. 1,000-lb. lots or more lb 2.35 - —
smaller lots lb 2.45 - 2.55
Sodium p-aminosalicylate, dms., 100 lbs. or more, frt. adjusted. lb 2.70 - 3.75
Antimoniate, bbls. c.l. dlvd E. lb .28 - —
l.c.l., dlvd. E lb .29½ - —
Arsenate, 45% arsenic pentoxide, dms., c.l., works lb .12½ - —
l.c.l. works lb .13¾ - .14⅛
Arsenite, 90%, pink powder, 75% arsenious oxide, dms., works lb .12¼ - —
l.c.l., works lb .13 - .14⅛
soln., dms., works gal .59 .67

Helpful Answers to Caustic Questions

CHEMICAL PROGRESS WEEK-APRIL 8-12

As a leading supplier of Caustic Soda, Columbia-Southern is asked many questions each month about this versatile "workhorse" alkali. While the answers probably are not completely new to every Caustic user, they do re-emphasize certain basic points that shouldn't be forgotten. We hope that you will find this series interesting and helpfully informative.

In how many different forms does Caustic come?

The four commonest forms of Caustic are anhydrous solid and flake (available in several particle sizes), and liquid concentrations of 50% and 73% strengths.

How can I determine my most economical Caustic buy?

So much depends on individual processing requirements that any flat answer might be misleading. The most important cost factors for your consideration are the purchase price of the material, transportation costs, unloading costs, labor costs for process handling, and investment cost of equipment required for unloading, storage and process handling. In general, equipment for handling solid or flake Caustic will be least costly, that required for 50% liquor next, and the equipment for handling 73% more expensive. Handling costs per ton of NaOH, however, will be in exactly the reverse order.

A more thorough way to get a clear cost picture of the best Caustic for your needs is to contact Columbia-Southern for the prompt services of our experienced Caustic Soda specialists. Just call, write or wire our Pittsburgh address . . . at no obligation, of course.

Is Caustic dangerous to handle?

Like most other chemicals, Caustic merits proper respect. Shipping improvements like the tank car dome platform (first standardized for all Caustic shipments by Columbia-Southern) have made unloading and initial handling much safer than in the past. As an elementary precaution, fast-valve showers and eye fountains should be readily accessible to all personnel who might come into contact with Caustic. Columbia-Southern will be happy to mail you copies of our up-to-date booklet, *Unloading and Handling Caustic Soda.* This handbook covers in detail such basic points as use of proper protective clothing, inspection of storage and piping facilities, tank car handling, steaming and dissolving procedures, complete stocking of First Aid cabinets, and the like.

Has Caustic Soda been used for a long time?

Caustic has one of the longest chemical pedigrees known. Various authorities agree in placing its earliest use among the Egyptians, who used the alkali in making cleansers. These ancient peoples produced Caustic, or lye, by utilizing the action of lime on solutions of plant ash sodas. Causticizing was effected cold, in the presence of a small amount of water, with the lye gradually separated by filtration through a cloth.

Is there more than one basic method of producing Caustic Soda today?

Yes. In the most popular electrolytic method, an electric current is passed through a sodium chloride brine solution contained in specially designed cells. Chlorine gas forms at the cell's anode, and a Caustic Soda solution collects at the cathode. This low concentration liquor is evaporated to yield the various commercial concentrations desired. The older lime-soda method of manufacture, not far removed in theory from the Egyptian process, utilizes the treatment of a soda ash solution with slaked lime. The resulting chemical reaction produces a weak Caustic Soda solution and a precipitate of Calcium Carbonate, which is filtered out. As in the electrolytic method, the Caustic solution is evaporated and purified to obtain commercial concentrations.

BIG SPLASH SAVES CUSTOMERS' DOLLARS. Advanced-design Columbia-Southern barges like the big beauty below carry Caustic along inland waterways, do a better job of protecting cargo purity, and unload more quickly and easily. Can you accept economical water delivery?

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IN CANADA: Standard Chemical Limited and its Commercial Chemicals Division

Sodium Ascorbate—Sodium Sulfanilate

Sodium ascorbate, dms., 25-50 kilo lots kilo 12.00 - —
10-kilo lots kilo 12.35 - —
5-kilo lots kilo 12.75 - —
1-kilo lots kilo 13.00 - —
bots. 500-gram lots kilo 13.50 - —
Benzoate, tech., bbls., dms., lots or more lb. .39 - —
USP bbls. dms. 100-lb lots or more lb .46 —
Sodium bicarbonate, USP gran., bgs., c.l., works 100 lbs. 2.95 - —
l.c.l. works 100 lbs 3.85 - —
powd., bgs. c.l. works 100 lbs 2.55 - —
l.c.l. works 100 lbs 3.45 - —
Bichromate, gran. bgs., c.l., t.l., works lb .13 —
l.c.l. works lb. .13½- .14¾
Bifluoride bbls. c.l. works, frt equald lb .19½ —
l.c.l., same basis lb .1990 —
Bisulfate, bulk, c.l., works 100 lbs. 2.00 - —
dms. c.l. frt equald 100 lbs 3.00 3.60
l.c.l. frt equald 100 lbs 3.50 4.10
Bisulfite anhyd bgs. c.l. works 100 lbs 5.00 - —
l.c.l., works 100 lbs 5.40 - —
soln. 35° bbls. c.l. works 100 lbs 1.55 - —
l.c.l. works 100 lbs 2.05 - —
Borate (see Borax).
Bromide, USP, bbls., works lb. .40 - —
Carboxymethyl cellulose (see CMC)

Sodium carbonate, cryst., monohydrated (see Soda, sal).
monohydrated bgs. c.l. works. 100 lbs. 3.10 - —
l.c.l., works 100 lbs. 3.50 - —
Chlorate cryst. dms. c.l. works. lb. .09 - —
l.c.l., works lb. .09½- .10½
Chloride, tech. (see Salt).
USP, gran., dms lb. .08 - —
Sodium chlorite, tech., dms., c.l., works lb. .58 - —
20-ton lots or more works lb. .66 —
smaller lots works lb 70 .73
Chloroacetate, tech. dms., c.l., works lb .27 - —
l.c.l. works lb 28 - —
Chromate anhyd fiber dms., c.l., t.l., works lb. 14¾- —
l.c.l., same basis lb. .15¼- .16½
tetrahydrate, bgs., c.l., t.l., works lb. .1015- —
l.c.l lb .1065- 1190
Citrate, anhyd., dms. lb. .62 - —
NF VIII, gran. dms lb. 26½ 27½
USP, XIV gran., dms lb .29½ 30½
Sodium citrate USP powd prices ½c higher
Cyanate, dms., 1,000 lb. lots, works. lb. .85 - —
smaller lots, works lb. .90 - 1.10

Sodium cyanide, flake, 96-98%, dms., c.l. or 20,000-lb. lots lb. .193 - —
over 1,000-lb. lots lb. .203 - —
100-lb. to 1,000-lb. lots lb. .213 - —
Granular sodium cyanide 1c. higher.
Diacetate, 33-35% acidity, 250-lb. dms., works lb. .15 - —
l.c.l. works lb. .15¾- —
anhyd., dms., c.l. works lb .18 —
l.c.l works lb 18¾- —
Ferrocyanide, bgs., 10-ton lots lb. .13½- —
smaller lots lb. .14 - —
Sodium fluoride, white, 97%, fib. dms., c.l., works, frt. equald lb. .1390- —
l.c.l. works lb .1430- —
Formate bgs., c.l., works 100 lbs. 7.60 - —
l.c.l., works 100 lbs 8.65 - —
Gentisate 100-lb. fib dms lb 5.50 - —
Gluconate, refd. dms. lb .80 .83
tech dms lb .35 —
Sodium hydride, powd., dms., works. lb. 1.90 - 2.75
Hydrosulfide (see Sodium sulfhydrate)
Hydrosulfite, dms., c.l., frt. alld. lb. .24 - —
l.c.l. frt alld lb. .24½- —
Hydroxide, NF, pellets, 100-lb. dms., 1 to 100-dm. lots lb. .23½- .28
technical (see Soda Caustic)
Hypophosphite, NF, dms., 1,000-lb. lots lb. .97 - —
Hyposulfite, anhyd., tech., bgs., c.l., works 100 lbs. 7.25 - —
l.c.l. works 100 lbs. 7.65 - —
photo grade, bgs. c.l., works. 100 lbs. 8.05 - —
l.c.l., works 100 lbs. 8.45 - —

Sodium hexahydrate, pea cryst., bgs., c.l., works 100 lbs. 5.15 - —
l.c.l., works 100 lbs 5.55 - —
photo grade bgs., c.l., works, 100 lbs. 7.75 - —
l.c.l., works 100 lbs 8.05 - —
Pentahydrate, tech., bgs., c.l., works 100 lbs. 5.15 - —
l.c.l., works 100 lbs 5.55 - —
Iodide, USP, bots., dms lb. 2.55 - —
Sodium lactate, edible, 60%, cbys., dms., works lb. .26½- —
Lauryl sulfate, dms. c.l. dlvd lb .19 —
l.c.l., dlvd lb .19½- .20¾
tanks, dlvd lb .18 —
Metabisulfite (see Sodium bisulfite)
Metaborate octahydrate gran. bgs., c.l., works ton 87.00 - —
ton lots, ex whse ton 143.00 - —
smaller lots, ex whse ton 148.00 - —
tetrahydrate, dms. c.l., works ton 204.00 - —
ton lots, ex whse ton 242.50 - —
smaller lots, exwhse ton 247.50 - —
Metallic bricks, 14,000-lb. lots or more, works lb. .19½- —
fused, 14,000-lb lots, works lb .19 - —
tanks, works lb. .17 - —
Metanilate, bbls., frt. alld lb. .62 - —
Metasilicate, anhyd., bgs., c.l., works 100 lbs. 5.70 - —
l.c.l. works 100 lbs 6.15 8.10
dms., c.l 100 lbs 6.20 —
l.c.l. 100 lbs 6.65 8.55
Pentahydrate, bgs. c.l. works 100 lbs 4.45 —
l.c.l. works 100 lbs 4.85 6.75
dms., c.l. works 100 lbs 4.95 —
l.c.l., works 100 lbs 5.35 7.25
Molybdate, anhyd., dms., works, frt. equald lb. .92 - .96
cryst. dms. works frt. alld lb. .73 .74
Monoglutamate (see Monosodium Glutamate).
Sodium monohydrate (see Sodium carbonate monohydrated).
Naphthionate bbls lb. 70 - —
Nitrate, crude dom. bgs., c.l., works ton 47.00 - —
bulk c.l. works ton 43.50 - —
imp. 100-lb. bgs., c.l. Atl Gulf, Pac., whse ton 49.50 - —
bulk, c.l. same basis ton 46.00 - —
Nitrite, USP, bbls., c.l., works, frt equald 100 lbs. 8.50 - —
l.c.l., same basis 100 lbs. 10.50 - —
Orthosilicate conc., dms., c.l., works 100 lbs 6.70 - —
l.c.l., works 100 lbs. 7.05 7.65
hydrated, flake bbls. c.l. works. 100 lbs. 5.65 - —
l.c.l., works 100 lbs. 7.60 7.90
Oxalate, 88% bgs., works 100 lbs. 10.85 - —
Para-aminobenzoate (see Sodium p-Aminobenzoate)
Para-aminosalicylate (see Sodium p-Aminosalicylate).
Pentachlorophenate, briquets, bgs., c.l., works, frt equald lb. .26 - —
l.c.l. same basis lb. .27½- .34
pellets, bgs., c.l., same basis lb. .26 - —
l.c.l. same basis lb. .27½ .34
powd., bgs., dms., c.l., same basis lb. .25 - —
l.c.l. same basis lb. .26½ .33
Sodium pentachlorophenate, 20,000 lbs., min. truckloads, ¼c. per lb over carlot prices
Perborate, NF, tech., bgs., c.l., works lb. .19 - —
l.c.l. works lb. .21 - —
Peroxide, dms., c.l., dlvd. E. of Miss lb. .20 - —
l.c.l. same basis lb. .20½- .21
Phenolsulfonate, USP IX, gran., dms lb. .48 - .49
Sodium phosphate, dibasic, anhyd., bgs., c.l., frt. equald 100 lbs. 7.05 - —
l.c.l., works 100 lbs. 8.05 8.65
duohydrate, bgs., c.l., frt equald 100 lbs. 7.60 - —
l.c.l., frt. equald 100 lbs. 8.10 - —
USP dried powd bgs., dms., works lb. .19 - .20¼
monobasic anhyd., bgs., c.l., frt. equald 100 lbs. 8.70 - —
l.c.l. frt equald 100 lbs 9.10 9.70
tribasic, anhyd., bgs., c.l., frt. bgs., c.l., frt. equald 100 lbs. 8.65 - —
l.c.l., frt. equald 100 lbs 9.05 9.65
cryst., bgs., c.l., t.l., frt. equald 100 lbs 4.40 - —
l.c.l., frt. equald 100 lbs. 4.80 5.40
Sodium phosphate in dms., 60c. to 80c. higher than bgs.
Prussiate, yellow (see Sodium ferrocyanide).
Pyrophosphate, acid, bgs., c.l., works, frt. equald 100 lb. 10.85 - —
l.c.l., works 100 lbs. 11.60 11.85
Ferric, dms., c.l., t.l., works lb. .36 - —
l.c.l., works lb. .37 .39
tetrabasic, anhyd., bgs., c.l., works, frt. equald 100 lbs. 7.52½- —
l.c.l. frt equald 100 lbs 7.92½ 8.52½
Salicylate, USP, dms lb. .78 - .80
Sesquicarbonate, bgs., c.l., works. 100 lbs. 2.35 - —
l.c.l., dlvd. zone 1 100 lbs. 4.10 - 4.35
zone 2 100 lbs. 4.35 - 4.60
zone 3 100 lbs. 4.75 - 4.90
zone 4 100 lbs 5.35 - 5.60
Sales zones are: (1) Atl. States E. of Miss., R. and N. of south bound of Ky. and Va., Ala., La., and Miss., south of 31° Tex. E. of 100°; S. of 31° Fla.; also Me., N. H., and Vt., in which there are special county zones; Davenport, Ia., and St. Louis; (2) Ark. E. of 98° Ga.; Iowa (except Davenport), Minn. Mo. (except St. Louis) Neb. E. of 98° N. C., S. C., Tenn. and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No. of 31°; (3) Ark. W. of 96° Kan., Neb. W. of 98°, N. D., Okla., S. D., Tex., W. of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo. and El Paso, Tex.
Sesquisilicate, hydrated, bgs., c.l., works. 100 lbs. 5.00 - —
l.c.l., works 100 lbs. 5.35 - —
dms., c.l., works 100 lbs. 5.50 - —
l.c.l., works 100 lbs. 5.85 - —
Silicate, liq., 40° Be, 1:3.2, turbid, dm., c.l., works 100 lbs. 1.55 - —
l.c.l., works 100 lbs. 1.90 - 2.40
tanks, works 100 lbs. 1.20 - —
47° Be, turbid, 1:2.9, dms., c.l., works 100 lbs. 2.25 - —
l.c.l., works 100 lbs. 2.85 3.10
tanks, works 100 lbs. 1.90 - —
52° Be, turbid, 1:2.4, dms., c.l., works 100 lbs. 2.65 - —
l.c.l., works 100 lbs. 3.00 - 3.50
tanks, works 100 lbs. 2.30 - —
solid, 1:3.2, bgs., works ton 67.50 - —
Silicofluoride, bgs., c.l., works lb. .075 - —
l.c.l., works lb. .079 —
Sodium silicofluoride in dms., 0.4c per lb higher
Stannate, dms., works, frt. alld, E lb. .633 - .692
Sulfa drugs (see Sulfa name).
Sulfanilate, bbls., works lb. .22 - —

Your alkaline cleaners and detergent compounds don't have to be "hot" to be powerful. Formulate them with

Cowles DRYMET®

ANHYDROUS SODIUM METASILICATE

DRYMET provides power—abundant active alkalinity—without raising the pH of your compounds to a disagreeable or dangerous range.

That's because DRYMET, itself, is so securely buffered. Its alkalinity is active and available for detergency—but controlled.

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Cleveland 3, Ohio

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Company_____

Address_____

City_____ State_____

CHEMICAL PROGRESS WEEK April 8-12

Cowles CHEMICAL COMPANY
CLEVELAND 3, OHIO

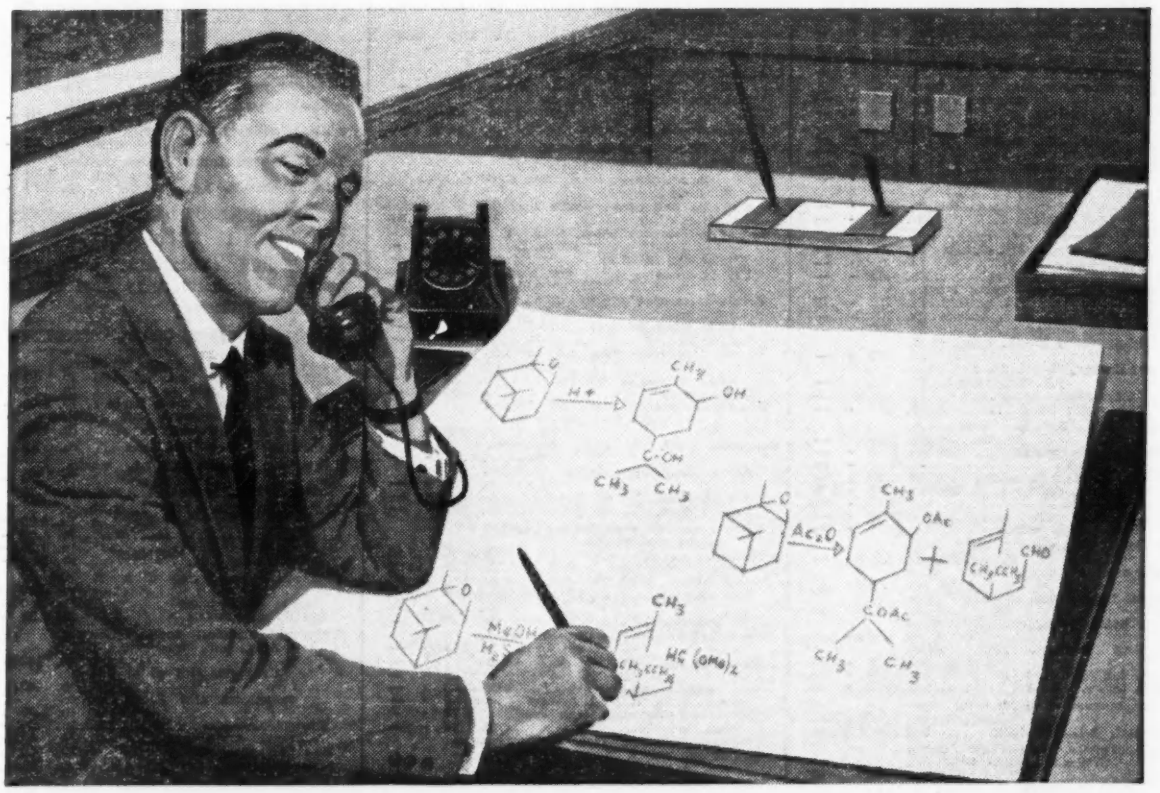
Sodium sulfate, NF, VII, dried, powd., dms lb. .22½- —
tech. anhyd. bgs. c.l., dlvd. E ton.52.00 —
detergent, rayon grade, bgs., c.l., works ton.34.00 - —
bulk, c.l., works ton.31.00 —
USP, cryst., fib dms lb .17½- .18
gran., fib dms lb .17½ .18
Sulfhydrate, flake, 70-72%, dms., c.l., works lb. .06¾- —
t.c.l., works lb. .07¾- —
liq., 40-44% tanks works, 100% basis ton.120.00 —
Sulfide flake dms. c.l. works, E., frt. equald lb .05½- —
t.c.l., same basis lb .06½- —
fused bbls c.l works E. frt equald lb .05 - —
t.c.l., same basis lb .06 - —
Sulfite, anhyd., bgs. c.l. 100 lbs. 3.50 - —
t.l., same basis 100 lbs. 4.00 - —
Sulfocyanide CP (see Sodium thiocyanate)
Tetraborate (see Borax)
Tetrasulfide liq. 40%, dms., c.l., c.l. works lb .04 - —
t.c.l. works lb .05 - —
Thiocyanate, CP, dms lb .55 - .65
tech. anhyd. dms. 1 ton lots or more, works lb .317 —
less than ton lots works lb .337 —
Thiosulfate, NF, cryst., bbls lb. 13½- —
tech (see Sodium hyposulphite)
Titanate, ctns., c.l., works lb. .14¼- —
5-ton lots, works lb. .14½- —
1-ton or less, works lb. .14¾- —
Toluene sulfonate dms. c.l. or t.l lb .38 —
t.c.l. lb .42 - —
Trichloroacetate, 90% 100-lb. dms., c.l., frt. alld. E lb. .37½- —
t.c.l. frt adjusted E lb 39½- —
50-lb. dms., c.l., frt. alld. E lb. .38 - —
t.c.l. frt adjusted E lb 40 —
10-lb. ctns., c.l., frt alld E lb 44 - —
t.c.l. frt adjusted E lb 46 —

Prices on Sodium trichloroacetate W of the Rockies are 1¾c per pound higher

Tripolyphosphate, bgs. c.l. works, frt equald 100 lbs 7.87½- —
t.c.l., same basis 100 lbs 8.27½ 8.87½
Trisilicate, powd. 1:3.2, bgs. c.l., works 100 lbs 8.65 —
t.c.l. works 100 lbs 9.40 9.80
dms., c.l. works 100 lbs 9.05 —
t.c.l. works 100 lbs 9.80 10.30
Tungstate tech. kgs dlvd E lb 2.15 —
Sodium-ammonium phosphate, purif., cryst., dms., works lb. .52 - —
Sodium-carboxymethyl cellulose (see CMC)
Sodium cinchophen (see Cinchophen-sodium)
Sodium-formaldehyde sulfoxylate, dms. c.l., dlvd lb. .21 - —
t.c.l. same basis lb. .21½- —
Sodium-zirconyl sulfate fiber dms., 1,000-lb lots or more works lb. .28 - —
smaller lots same basis lb. .30 —
Solvent naphtha, coaltar, high flash, tanks, frt. equald gal. .31 - .33
Solvent naphtha, petroleum, partial aromatic, tanks, 205°-282°F. b.r., 41°C., m.a.p., N. Y., N. J gal. .245 - —
tanks, 212°-278°F. b.r., 43°C., m.a.p., N. J gal. .26 - —
212°-284°F. b.r., 19°C., m.a.p., N. J gal. .29 - —
224°-280°F. b.r., 48°C., m.a.p., Houston gal. .215 - —
273°-361°F. b.r., 29°C., m.a.p., N. J gal. .29 - —
282°-325°F. b.r., 41.5°C., m.a.p., Houston gal. .25 - —
287°-386°F. b.r., 31°C., m.a.p., N. J gal. .29 - —
310°-314°F., b.r., 13.5°C., m.a.p., Texas City gal. .33 - —
310°-348°F. b.r., 17°C., m.a.p., N. Y., N. J gal. .35 - —
320°-360°F. b.r., 10°C., m.a.p., N. Y., N. J gal. .33 - —
324°-349°F. 37°C., m.a.p., Houston gal. .33 - —
341°-390°F. b.r., 35°C., m.a.p., N. J gal. .27 - —
352°-413°F. b.r., 30°C., m.a.p., Houston gal. .33 - —
358°-401°F. b.r., 25°C., m.a.p., N. Y., N. J gal. .39 - —
364°-404°F. b.r., 19°C., m.a.p., N. Y., N. J gal. .425 - —
367°-418°F. b.r., 19.6°C., m.a.p., N. Y., N. J gal. .33 - —
Sorbitan monostearate, fib dms., 20,000-lb. lots, works lb. .32 - —
10,000 to 20,000-lb lots, works. lb. .34 - —
smaller lots, works lb. .37 - .39
Tristearate, fib dms., 20,000-lb. lots, works lb. .33 - —
10,000 to 20,000-lb lots, works. lb. .35 - —
smaller lots, works lb. .38 - .40
Sorbitol, cryst., resin grade, pellets, dms., c.l., works lb. .23 - —
1 to 5-ton lots, works lb. .25 - .26
powd., dms., 1 to 5-ton lots, works lb. .38 - —
soln., coml., aqueous, dms., c.l., works lb. .24¼- —
ton lots, works lb. .25 - —
smaller lots, works lb. .25¼- —
tanks, works lb. .23¼- —
reg. 70% aqueous, dms., c.l., works lb. .16 - —
ton lots, works lb. .16¾- —
smaller lots, works lb. .17 —
tanks, works lb. .15 - —
Soybean meal, 44% bulk, Decatur, ton.46.00 - —
protein chemically isolated, bgs., c.l., works lb. .23 - —
mechanically refd. bgs., l.c.l., works lb. .068 - —
Soybean oil, crude, tanks, Decatur, lb. .12½- —
Foots, soapstock, acid 95%, tanks, N. Y. lb. .07 - —
Refd., alkali, dms. lb. .1728- .1738
tanks lb. .1526- —
clarified, dms. lb. .17 - .17½
tanks lb. .15 - —
salad, dms. lb. .17½- .17¾
tanks lb. .15½- —
Soybean oil acids, dbl., dist., dms. lb. .18¾- .20¼
tanks lb. .16¼- —
Single-distilled, dms lb. .17¼- .19¼
tanks lb. .15¼- —
Soybean pitch, dms., works lb. .05 - .05¼
Sparteine sulfate, cns oz. .80 - .90
Spearmint leaves, dom. bls lb 75 —
Spearmint oil, dms lb. 4.25 - —
Sperm oil, bleached, winter, 45°, dms lb. .1775- .1825
tanks lb. .16 - —
Nat., winter, 45°, dms lb. .1675- .1725
tanks lb. .15 - —
Spermaceti wax, blocks, cs lb. .30 - .33
Cakes, cs lb. .31 - .34
Spruce extract, liq., reg. tanks, works lb. 01¾ —
powd., super, bgs., c.l., works lb. .05¼- —
t.c.l., works lb. .05½ —
Spruce oil, cns., dms lb. 2.10 - 2.75
Squill, white, bls lb. .16 .18
powd., bbls., bxs lb. 17 .20
St. John's bread, edible bls lb. 13 .15
Stannic chloride, anhy., dms., works lb. .79 - .80
Oxide, dms., dlvd. E lb. 1.05½- 1.06½
Stannous chloride, anhyd., dms., works lb. .915 - 1.409
hydrous, cryst., dms., works. lb. .80 - .81
Sulfate, dms., works lb. 1.05 - 1.07
Starch corn pearl paper bgs., c.l. 100 lbs. 7.32 - —
t.c.l. 100 lbs. 7.47 - —
powd., paper bgs., c.l. 100 lbs. 7.44 - —
t.c.l. 100 lbs. 7.59 - —

Prices for corn starch in cotton bags, 15c per 100 lbs higher

Potato, dom. Idaho bgs., c.l., works lb. .06¼- —
Maine, bgs., c.l., works lb. .06¼- —
ex whse, N. Y. lb. .08¼- .09¼
Rice, bgs t.c.l. lb 15½ 16
Wheat, bgs lb 08½ 09
Star root (see Helonias root).
Stargrass Root (see Aletris root).
Stavesacre seed, bgs lb. 60 61
Stearic acid, bdl. pressed, bgs. lb. .15¼- .17¼
Single pressed, bgs lb. .14¾- .16¾
Triple pressed, bgs lb. .17½- .19½
Stearine, oleo (see Oleostearine).
Stoddard solvent, petroleum, tanks, east coast, N. J., N. Y. gal. .18 - —
tanks, western Pennsylvania gal. .16 - —
tanks, group 3 gal. .12875- —
tankwagon, Boston gal. .20 - —
Chicago gal. .299 - —
Cleveland gal. .23½- —
Los Angeles, ex tax gal. .199 - —
Newark gal. .19 - —
New York gal. .19 - —
Philadelphia gal. .19½- —
Pittsburgh gal. .19 - —
Stramonium leaves, bgs lb 18 20
Streptomycin hydrochloride, bulk, gram. .0850- .0875
Sulfate, bulk gram. .0850- .0875
Strontium bromide NF, dms., 150-lb fib. dms lb. .84 - —
Carbonate, pure dms. 5-ton lots or more, works lb .35 - —
1-ton lots, works lb .37 - —
tech., dms., works lb .19 - —
Chromate, bbls., works lb. .46 - —
Iodide, pars, 25-lb lots lb 3.42 - —
Nitrate, bbls., c.l. works 100 lbs. 11.00 —
l.c.l. works 100 lbs 12.00 —
Salicylate, NF, dms lb. 1.88 - —
Sulfate, air floated, 90%, 325 mesh, bgs., works ton.56.70 - 66.15
Strophanthin, K., bots. oz.23.00 - 25.50
G. (see Ouabain, USP).
Strophanthus seed, Kombi, biologically tested, bgs lb 3.50 3.75
Styrax, USP cs lb .78 .80
Styrene monomer, polymer grade, 99½% dms. c.l. frt. alld. lb. 22½- —
t.c.l. same basis lb 23½- —
tanks, same basis lb. 20½- —
synthetic rubber grade, 99%, dms., c.l. frt. alld lb. 18½- —
t.c.l. same basis lb 19½- —
tanks, same basis lb 16 —
Styrolyl acetate bots lb 1.45 1.70
Succinic acid, purif., cryst., bbls., works lb. .62 - .75
Sucrose, refd., white, bgs. refy., E lb. .0835- —
Octa-acetate, denaturing grade, 100-200-lbs. bgs., l.c.l., works lb 76 —
Sugar (see Sucrose).
Sugar cane wax, dom., refd., slabs, 80 lb. ctns., works lb. .65 - .75
80 lb. ctns., spot lb. .67¼- .72¼
Sulfabenzamide, dms lb 4.00 4.50
Sodium, dms lb 4.10 4.60
Sulfacetamide fib dms lb 4.00 4.20
USP, same basis lb 5.00 5.20
Sodium fib dms lb 5.00 5.20
USP, same basis lb 5.20 5.40
Sulfadiazine USP microcrystals, dms lb.10.60 11.10
powd. dms lb.10.25 10.75
Sulfadiazine-sodium USP dms lb.11.25 11.75
microcrystals dms lb 11.60 12.10
Sulfaguanidine USP dms lb 2.50 —
Sulfamerazine USP microcrystals, lb.10.65 11.15



Heard the latest about Terpenes?

Becco has epoxidized them! More than five years of research on epoxidation have produced some interesting new products. Dipentene Monoxide and *a*-Pinene Oxide are now out of the laboratory and available, even in drum quantities.

Becco Dipentene Monoxide combines the reactivity of an epoxy group with that of an olefinic double bond in a cyclic terpene molecule. This compound undergoes the usual reactions of the epoxy group and the external double bond in a terpene molecule.

Becco *a*-Pinene Oxide combines the reactivity of an epoxy group with that of the bicyclic system of *a*-Pinene causing it to undergo some unusual reactions. It does not undergo the ring-opening reaction of an epoxide but rearranges in the presence of acid. In water solution, sobrerol is the main product; in anhydrous media, it is campholenic aldehyde.

These terpene oxides have many potential uses as intermediates in the manufacture of perfumes, flavors, pharmaceuticals, protective coatings, insecticides, bactericides, lubricant additives, adhesives, plasticizers, flotation agents, and in organic synthesis.

Typical properties of these epoxides are:

	% Oxirane Oxygen	F.P. °C	B.P. °C	Density at 20°C	Solubility
Dipentene Monoxide	8.9	<—60	74-76 (10 mm)	0.929	Insoluble in water. Soluble in most of the common solvents.
a-Pinene Oxide	9.4	<—60	61-62 (10 mm)	0.963	

Write Becco for experimental quantities and technical assistance in possible application for these compounds. Ask for Becco Bulletins Nos. 81 and 82.

BECCO CHEMICAL DIVISION
Food Machinery and Chemical Corporation
Station B, Buffalo 7, New York

Buffalo • Boston • Charlotte, N. C. • Chicago
New York • Philadelphia • Vancouver, Wash.

CHEMICAL PROGRESS WEEK APRIL 8-12

Progress in Peroxygens **BECCO**

fmc FOOD MACHINERY AND CHEMICAL CORPORATION

FMC CHEMICALS INCLUDE: BECCO Peroxygen Chemicals • WESTVACO Phosphates, Barium and Magnesium Chemicals • WESTVACO Alkalis, Chlorinated Chemicals and Carbon Bisulfide • NIAGARA Insecticides, Fungicides and Industrial Sulphur • OHIO-APEX Plasticizers and Chemicals • FAIRFIELD Pesticide Compounds and Organic Chemicals

Sulfamerazine-Sodium—Vinyl Trichloride

Sulfamerazine-sodium USP dms., lb 11.25 - 11.75
Sulfamethazine microcrystals, dms., lb 8.90 - 9.40
powd., dms lb 8.50 - 9.00
Sulfanilamide USP 30-80 mesh, dms lb 1.40 - 1.60
microcrystals, dms lb 1.70 - 1.90
powd. dms lb 1.30 - 1.50
Quinoxaline veterinary, dms lb 6.40 - 6.75
Sulfanilic acid, tech., dms., c.l., frt. alld lb .21 - —
lb .21 - —
dms., l.c.l., frt. alld lb .23 - —
Sulfapyridine NF powd. bots. tins, lb 7.00 - 7.50
Sulfapyridine-sodium mononydrate, dms lb 7.50 - 8.00
Sulfathiazole, NF, microcrystals, dms lb 2.85 - 3.00
powd dms lb 2.50 - 2.65
Sulfathiazole-sodium, NF, dms lb 2.75 - 2.90
Sulfur coml flour, bgs. mines 100 lbs 2.55 - —
bbls., mines 100 lbs. 3.40 - —
lump bgs mines 100 lbs 2.45 - —
bbls., mines 100 lbs. 3.00 - —
crude, bulk, f.o.b. cars, mines, long-ton 26.50 - —
export f.o.b. vessels Gulf ports, long-ton 28.00 - —
domestic and Canada, f.o.b. vessel Gulf port long-ton 28.00 - —
Mexican, dark or blended, f.o.b. vessel, Coatzacoalcos, long-ton 25.00 - —
refd., flowers, NF, bgs., mines, 100 lbs. 4.75 - —
bbls., mines 100 lbs. 6.10 - —
flour, light, bgs., mines 100 lbs. 4.35 - —
bbls., mines 100 lbs. 5.35 - —
lump, bgs., mines 100 lbs. 4.05 - —
rolls, bgs., mines 100 lbs. 4.60 - —
bbls., mines 100 lbs. 5.35 - —
salt block, bgs., mines 100 lbs. 4.25 - —
virgin block, bbls., mines 100 lbs. 4.30 - —
rubbermakers, coml., reg. bgs., mines 100 lbs. 2.65 - —
bbls., mines 100 lbs. 3.90 - —
98-100% passing through 325 mesh, bgs., mines 100 lbs. 2.75 - —
bbls., mines 100 lbs. 4.00 - —
refd., bgs., mines 100 lbs. 4.00 - —
bbls., mines 100 lbs. 5.15 - —
treated, 2.5% mineral oil, bgs., mines 100 lbs. 2.95 - —
bbls., mines 100 lbs. 4.20 - —
Sulfur dichloride, ret. dms., c.l., works, frt. equald lb. .04½ - —
l.c.l., same basis lb. .05¼ - —
tanks, same basis lb. .04 - —
Dioxide, liq., coml., cyls., works, frt. equald lb. .10 - .12
multi unit cars, works lb. .0535 - —
tanks, works lb. .045 - —
refrigeration, 150-lb. cyls., dlvd. lb. .30 - —
Monochloride, 55-gal. non-ret. dms., c.l., frt. equald lb. .04½ - —
l.c.l., same basis lb. .05¼ - —
tanks, same basis lb. .04 - —
Sulfuric acid, 60° Be, cbys., c.l., works 100 lbs. 2.00 - —
cbys., l.c.l., works 100 lbs. 2.45 - —
tanks, works ton 18.60 - —
66° Be, cbys., c.l., works 100 lbs. 2.25 - —
cbys., l.c.l., works 100 lbs. 2.55 - 3.35
tanks, works ton 22.35 - —
98%, tanks, works ton 23.50 - —
99-100%, tanks, works ton 23.95 - —
CP, NF, Consumers' cbys., c.l., ft. equald lb. .12¾ - —
consumers' cbys., l.c.l., same basis lb. .14¼ - .14¾
5-pt. bots. extra, cs., c.l., works, frt. alld lb. .16¼ - —
5-pt. bots. extra, cs., l.c.l., same basis lb. .18¼ - .18¾
Fuming (oleum), 20%, tanks, works ton 25.00 - —
40%, tanks, works ton 29.00 - —
65%, tanks, works ton 39.50 - —
Sumac leaves, 28% tannin, bgs ex-dock ton 135.00 Nom.
Ground, bgs., ex-dock ton 130.00 Nom.
Superphosphate, run-of-pile under 22% a.p.a pulv., bulk, c.l., Balto. unit-ton .88 .91
Carteret N J unit-ton .88 .91
triple 48% or more a.p.a pulv., bulk c.l. East Tampa, Fla. unit-ton .99 -
Sweet birch oil, USP, northern, cns. lb. 4.25 - 9.50
southern, cns. lb. 2.30 - 2.75

T

2,4,5-T dms. c.l. works frt. equald. lb 1.18 - —
l.c.l. same basis lb 1.25 - —
Isopropyl ester dms., c.l., works, frt. equald lb 1.24 - —
l.c.l. works lb 1.29 - —
Talc, dom. ord. Calif. grd. ogs. c.l., works ton 33.00 - 39.50
Vermont off color grd., bgs. c.l. works ton 19.40 - —
l.c.l. works ton 37.00 - —
fibrous, New York, grd., bgs., c.l., works ton 28.00 - —
l.c.l. works ton 31.00 - 36.00
99.5% 325 mesh bgs. c.l. works ton 31.00 - —
l.c.l. works ton 34.00 - —
Talc, firbous, New York, 99.95% micronized, bgs., works ton 38.00 - —
Imp. Canadian grd bgs. c.l. mines ton 20.00 - 25.00
Tall oil, crude, dms., c.l., works lb. .04½ - —
tanks, works lb. .02½ - .03
Dist., dms., c.l., works lb. .07¾ - —
dms., l.c.l., works lb. .08 - .08½
tanks, works lb. .06½ - —
Refd., dms., c.l., works lb. .06¾ - —
dms., l.c.l., works lb. .07 - .07½
tanks, works lb. .05½ - .06
Tall oil acids, dms., c.l., works lb. .09 - .09½
tanks, works lb. .07½ - .08
Tall pitch, dms., c.l., works ton 50.00 - 70.00
tanks, works ton 30.00 - 40.00
Tallow, edible, tanks, dlvd lb. .12½ - .13
inedible, fancy, bleachable, tanks, dlvd lb. .07⅝ - —
guaranteed, dms., f.a.s. lb. .09½ - —
No. 1, tanks, dlvd lb. .06⅞ - —
prime, tanks, dlvd lb. .07⅝ - —
special tanks, dlvd lb. .07 - —
sulfonated, 25% bbls., l.c.l lb. .08⅝ - .08⅞
50%, bbls., l.c.l lb. .09⅝ - .10⅛
Tallow acids, dist., dms lb. .15¼ - .17¼
tanks lb. .13¼ - —
Hydrogenated, dms lb. .14¼ - .16¼
Tallow oil, acidless, dms., c.l. lb. .14½ - —
dms., l.c.l. lb. .15½ - .17
Tangerine oil, Floridian, dms. lb. 2.00 - 2.80
Tankage, animal feeding, 9-11% ammonia, bulk unit-ton. 5.00 - —
Chicago, bulk unit-ton. 6.00 - —
Tannic acid, NF, fluffy, bbls., 1,000-lb. lots lb. 2.05 - —
bbls., smaller lots lb. 2.06 - 2.10
NF, powd., bbls., 1,000-lb. lots lb. 1.95 - —
bbls., smaller lots lb. 1.96 - 2.01
Tech., dms. lb. 1.05 - —
Tansy oil, dms. lb. 7.50 - 8.40
Tapioc flour Brazilian bgs ex whse lb. .12½ - .13½
Siamese, AAA, same basis lb. .08 - .09
Tar acid oil, 15-18%, dms., c.l., frt. equald gal. 47 - 49
l.c.l. same basis gal. 50 - 51
tanks, same basis gal. 39 -
25-28%, dms., c.l., same basis, gal. .54 - .56
l.c.l. same basis gal. 57 - 58
tanks, same basis gal. 46 -
50-53% dms., c.l. same basis, gal. .70 - .72½
l.c.l. same basis gal. 73½ - 74½
tanks, same basis gal. 62½ -
Coal (see Coaltar).
Tartar emetic (see Antimony-potassium tartarate)
Tartaric acid, dom., USP, 230 or 250-lb. dms., c.l. lb. .49 - —
230 or 250-lb. dms., 10,000-lb. lots, 1 shipt lb. .49½ - —
230 or 250 lb. dms., smaller lots lb. .50 - —
100-lb. dms. lb. .51 - —
Imp., bgs. lb. .42 - .45
Terpine glycol ether, dms., c.l., works lb 23½ -
l.c.l. works lb 25½ -
tanks, works lb 22 -
Hydrate, NF, cryst., powd., 100-lb fib. dms lb. .70 -
Terpineol, dms., l.c.l., dlvd E lb. .23¾ -
extra dms lb 41 60
prime dms lb 30 45
Terpinyl acetate, extra cns. dms. lb 60 75
prime, dms lb 55 70
Propionate dms lb 1.75 4.00
Terra alba (see Gypsum)
Testosterone USP 100-gm. lots, bots gram .70 —
Propionate USP 100-gm lots, bots gram .68 —
Tetrachloroethane, dms. works lb 14½ —
Tetrasodium pyrophosphate (see Sodium pyrophosphate)
Tetrachloroethylene, tech. (see Perchloroethylene).
USP, 55 gal. dms., works lb. .20½ - .21½
smaller dms., works lb. .23½ - .25
Tetraethyl orthosilicate, dms., c.l., dlvd. E lb. .61½ - —
l.c.l., dlvd E lb. .62½ - —
Pyrophosphate, 40%, cns., dms., frt. equald lb. .75 - —
Tetraethylenepentamine, dms., c.l., dlvd. E lb. .49 - —
l.c.l., dlvd E lb. .50 - —
tanks, dlvd. E lb. .47 - —
Tetrahydrofuran, dms., c.l., or t.l., works lb. .36½ - —
l.c.l. or t.l., works lb. .37 - —
tanks, works lb. .35 - —
Tetrahydrofurfuryl alcohol, dms., c.l., or t.l., f.o.b. Memphis, Tenn lb. .37 - —
Dms., l.c.l. or l.t.l., Memphis, Tenn lb. .38 - —
dms., l.c.l. or l.t.l., Newark, N. J. lb. .40 - —
Tanks, dlvd. E. of Denver lb. .365 - —
Tanks, dlvd. W. of Denver lb. .375 - —
Tetrapotassium phosphate (see Potassium phosphate).
Thallium metal dlvd lb. 12.50 - 15.00
Sulfate 99% bots dlvd lb 8.00 - 13.00
Theobromine, NF, fib. dms lb. 4.50 - —
And sodium acetate, USP, fib. dms. lb. 4.75 - —
Sodio-Salyicylate, NF, fib. dms lb. 3.90 - —
Theophylline, anhyd. or USP., 100-lb. dms lb. 3.65 - —
Thiamine hydrochloride, USP, regular fib dms kilo 60.00 - —
ampule grade, fib dms kilo 62.00 - —
Mononitrate, USP fib dms kilo 62.00 - —
Thiocarbanilide dms. ton lots lb 72 - —
less ton lots lb. 74 - —
Thiodiphenylamine (see Phenothiazine)
Thioflavin green toner, brilliant, molybdated, PMA, kgs., works lb. 5.10 - —
Tungstated, PTMA, kgs., works. lb. 6.40 - —
Thioglycolic acid, refd., cbys., 100% basis lb. 1.35 - 1.55
Thiosalicylic acid, purif., dms., 1,000-lb. lots, works lb. 4.00 - —
Thiourea, tech., bgs. t.l. frt. alld. lb .33 - —
l.c.l., frt. alld lb. .35 - —
Thorium nitrate, purif., fib dms., 100-lb lots or more, works lb. 3.50 -
dl-Threonine bots. 1-kilo lots. kilo 450.00 - 500.00
Thyme oil, NF, red., cns., dms. lb. 1.45 - 1.75
white, cns lb. 1.70 - 2.00
Tech, white, cns lb. .40 - 1.85
Thymol, fib. dms lb 2.50 - 2.75
Iodide NF dms lb 7.30 -
Timbo root (see Cube root).
Tin chloride (see Stannous chloride, anhydrous).
crystals (see Stannous chloride, hydrous).
Tin metal (Straits) lb. 1.00 - —
Oxide (see Stannic oxide).
Sulfate (see Stannous sulfate).
Tetrachloride, anhyd. (see Stannic chloride, anhydrous).
Titanium dioxide anatase, chalk-resistant, bgs., c.l., dlvd lb. .25½ - —
l.c.l., dlvd lb. .26½ - —
ceramic, bgs., c.l., dlvd lb. .23½ - —
l.c.l., dlvd lb. .24½ - —
reg., bgs., c.l., dlvd lb. .23½ - —
l.c.l., dlvd lb. .24½ - —
metallurgical, nat., gran., bgs., c.l., f.o.b. Jacksonville, Fla. ton. 120.00 - —
Niagara Falls, N. Y., c.l., ton. 137.50 - —
5-ton lots ton. 142.50 - —
ton lots ton. 147.50 - —
rutile, nonchalking, bgs., c.l., dlvd. E lb. .27½ - —
l.c.l., dlvd. E lb. .28½ - —
Milled metallurgical titanium dioxide $7.50 per ton higher.
Titanium hydride, powd., dms., works. lb. 8.10 - 9.00
Pigment, calcium-rutile base, reg., bgs., c.l., dlvd lb. .09¼ - —
l.c.l., works lb. .09¾ - —
high-tinting, dms., c.l. lb. .09 - —
l.c.l. lb. .09½ - —
Tetrachloride tech., dms., c.l., works lb. .26 - —
l.c.l., works lb. .27½ - .29
tanks, works lb. .20 - —
Tobias acid, bbls., frt. alld lb. .81 - —
d-a-Tocopherol, NF, conc., pure basis kilo. 91.00 - —
Acetate, NF, conc., pure basis kilo. 166.00 - —
Acid succinate, cryst. kilo. 148.00 - —
dl-a-Tocopherol, bots. kilo. 134.20 - —
Acetate, bots kilo. 122.00 - —
25% dry, powd., bots kilo. 30.50 - 32.00
o-Tolidine base, paste, kgs., 100% basis lb. 1.35 - —
dry, kgs., 100% basis lb. 1.40 - —
Hydrochloride paste, kgs., 100% basis lb. 1.35 - —
Tolu balsam, cns lb. 4.50 - 5.25
Toluene, coaltar, indust. or nitration tanks, works:—
Bethlehem, Pa gal. .32 - —
Birmingham dist gal. .32 - —
Chicago, dist gal. .32 - —
Cleveland dist gal. .32 - —
Geneva, Utah gal. .26 - —
Johnstown, Pa gal. .32 - —
Lackawanna, N. Y gal. .32 - —
Lone Star, Tex gal. .33 - —
Lorain, Ohio gal. .32 - —
Middletown, Ohio gal. .33½ - —
Minnequa, Colo gal. .32 - —
Philadelphia dist gal. .32 - —
Pittsburgh dist gal. .32 - —
Sparrows Point, Md gal. .32 - —
Terre Haute, Ind gal. .34 - —
Youngstown, Ohio gal. .33 - —
Petroleum, indust., 2° tanks, works:—Albany, N. Y gal. .35 - —
Bayonne, N. J gal. .34 - .35½
Baytown, Tex gal. .33 - .35½
Chicago, Ill gal. .35 - .35½
Detroit, Mich gal. .35 -
Houston, Tex gal. .33 - —
Philadelphia, Pa gal. .34 - —
Providence, R. I gal. .35 - .35½
Wood River, Ill gal. .34 - —
p-Toluenesulfonamide powd., dms., works lb. .70 - —
p-Toluenesulfonic acid, dms., c.l., t.l., works lb. .17 - —
Dms., l.c.l., works lb. .18 - —
p-Toluenesulfonic acid, monohydrate, dms., c.l., or t.l. lb. .90 - —
dms., 125 lbs. to t.l. lb. 1.00 - —
m-Toluidine dms. c.l., works, frt. alld lb. .79 - —
l.c.l. same basis lb. .80 - —
tanks same basis lb. .78 - —
o-Toluidine, dms., c.l., works, frt. alld lb. .23 - —
l.c.l. same basis lb. .24 - —
tanks, same basis lb. .22 - —
p-Toluidine, flake, dms., frt. alld lb. .64 - —
solid dms. frt. alld lb. .60 - .61
o-Toluidine-m-sulfonic acid, frt. alld. lb. .70 - —
p-Toluidine-m-sulfonic acid, bbls., works lb. .92 - 1.04
Toluidine red toner, deep shades, kgs., works lb. 1.70 - —
Light shades, kgs., works lb. 1.70 - —

Toluol

Toluol quotations, both coaltar and petroleum, may now be found under Toluene.

2,4-Tolylenediamine, cryst., fib. dms., c.l., frt. alld lb. .97 - —
l.c.l., frt. alld lb. 1.00 - —
powd., fib. dms., same basis lb. 1.00 - —
Tonka beans, Angostura, cks. lb. No prices.
Brazilian, Surinam, cs lb. 1.35 - —
Totaquine 100-oz. lots, cns oz. .42 - —
Toxaphene, dms. c.l., t.l., works. lb. .22 - —
l.c.l., l.t.l., works lb. .28 - —
Tragacanth gum, No. 1, ribbons, cs lb. 4.50 - 4.70
No. 2, cs lb. 3.50 - 3.75
No. 3, cs lb. 3.25 - 3.40
USP, powd., bbls. lb. 1.25 - 1.38
Triacetin, dms. c.l., dlvd. E. of Rockies lb. .39 - —
l.c.l., same basis lb. .40 - —
tanks, same basis lb. .37 - —
Tributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .42½ - —
l.c.l., frt. alld. E. of Denver, lb. .43½ - —
tanks, frt. alld. E. of Denver, lb. .40 -
Phosphate, dms., c.l., works lb. .52½ - —
l.c.l., same basis lb. .53½ - —
tanks, same basis lb. .50 - —
Tributylamine, dms., c.l., works lb. .67½ - —
l.c.l., same basis lb. .68½ - —
tanks, same basis lb. .65 - —
Trichloroacetic acid, bots. lb. 2.00 - 2.50
Trichlorobenzene, dms., c.l., frt. alld. E. lb. .14½ - —
l.c.l., frt. alld. E. lb. .15½ - —
tanks, frt. alld. E. lb. .13 - —
Trichlorobenzene prices in the West 1¾c. higher.
Trichloroethylene, dms., c.l., or t.l., works, frt. equald lb. .12½ - —
l.c.l., dlvd. E. lb. .14½ - —
tanks, works, frt. equald lb. .11¼ - —
1,1,1-Trichloroethane, dms., c.l., works lb. .13½ - —
l.c.l., works lb. .14¼ - .16¼
tanks, works lb. .11¼ - .12½
Trichlorophenoxyacetic acid (see 2,4,5-T).
Tricholine citrate, 85% soln., ret. chys. works, frt. adjusted lb. 1.40 - 1.45
Tricresyl phosphate, coaltar, dms., c.l., dlvd lb. .35 - —
l.c.l., dlvd lb. .36 - —
tanks, dlvd lb. .32½ - —
petroleum, dms., c.l., dlvd lb. .34½ - —
l.c.l., dlvd lb. .35½ - —
tanks, dlvd lb. .32½ - —
Tridecyl alcohol, mixed isomers, dms., dlvd lb. .26½ - —
dms., l.c.l., dlvd. lb. .27½ - —
tanks, dlvd lb. .24 - —
Triethanolamine, dms., c.l., dlvd. E lb. .24½ - —
l.c.l., same basis lb. .25½ - —
tanks, same basis lb. .22 - —
Triethylamine, dms., c.l., works, dlvd. E lb. .49 - —
tanks, same basis lb. .46½ - —
Triethyl citrate, refd., tech., non-ret dms. c.l., frt. alld. E. of Denver lb. .45¾ - —
l.c.l., frt. alld. E. of Denver. lb. .46¾ - —
tanks frt. alld. E. of Denver. lb. .43¾ - —
Phosphate, dms., c.l., dlvd lb. .40½ - —
l.c.l. dlvd lb. .41½ - —
tanks, dlvd lb. .38 - —
Triethylene glycol, dms., c.l., dlvd. E lb. .21 - —
l.c.l., dlvd., E lb. .22 - —
Triethylenetetramine, dms., c.l., dlvd. E lb. .51½ - —
l.c.l., dlvd. E. lb. .52½ - —
tanks, dlvd. E. lb. .49 - —
Tri-isopropanolamine, dms., c.l., dlvd. E lb. .23¼ - —
l.c.l., dlvd. E. lb. .24¼ - —
tanks, dlvd E. lb. .20¾ - —
Trimethylamine 25-40% soln., dms., c.l., works, frt. equald., 100% basis lb. .35 - —
l.c.l., works, frt. equald, 100% basis lb. .35½ - —
tanks, works, frt. equald, 100% basis lb. .26 - —
Trioxane, pure, dms., c.l., t.l., works lb. .50 - —
l.c.l., works lb. .51¼ - —
Tripentaerythritol bgs., l.c.l., works. lb. .35 - —
Triphenyl phosphate bbls., c.l., frt. equald lb. .40 - —
l.c.l., frt. equald lb. .41 - —
Triphenylguanidine bbls., works lb. .90 - —
tanks, same basis lb. .18½ - —
Tripropylene glycol dms., c.l., frt. alld E lb. .20½ - —
l.c.l. frt alld E lb. .21½ - —
Tripopylene glycol prices 1c. per lb. higher in West.
Phosphate (see Sodium phosphate tribasic)
Tyrothricin, USP, bots. grams. .55 - .58
dl-Tryptophane fib ctns. works. lb. 75.00 - —
Tung oil, dms., c.l., New York lb. .24¼ - —
Dms., l.c.l., same basis lb. .24¾ - .25¼
Tanks, New York lb. .22¾ - —
dom. mills lb. .22½ Nom.
Tungsten metal powd. 2-5 microns dms., works lb. 4.00 - —
Tungstic acid, tech., dms., 1,000-lb. lots, works lb. 3.00 - —
dms., smaller lots, works lb. 3.15 - 3.50
Tuscan red, bbls., frt. equald lb. .26 - .32
Turkey red, bbls., works lb. .62 - —
Turpentine gum (see Protective Coatings market, Naval Stores).
Turpentine oil, NF, cns., dms. lb. .28 - .45

U

Ultramarine blue, cobalt type, dry or pu'p, 250-lb. bbls., dlvd. N. of Tenn. and N. C., E. of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis lb. .35 - .39½
Jobbing types, bbls., same basis. lb. .19 - —
Regular types, dry bbls., same basis lb. .22½ - .35
Ultramarine blue dlvd. prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equald. with Chicago.
Umber pigment, burnt, American, bgs., c.l., works lb. .07 - .07¾
bgs., l.c.l., works lb. .07¼ - .08
Turkey-type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y. lb. .07¾ - —
Raw, American bgs., works lb. .07½ - .08¼
Turkey-type, bgs., works lb. .06¾ - .07
Undecylenic acid, dms. lb. 1.45 - —
Unicorn root, false (see Helonias root) True (see Aletris root)
Urea, 46% N indust., bgs., c.l., t.l., dlvd. E ton. 120.00 - —
l.c.l. dlvd E, ex whse ton. 140.00 - —
45% N agricultural, bgs., c.l., (30 tons) dlvd. E ton. 105.00 - —
Urea-ammonia liquor, A and B grades N basis, tankcars, Belle, W. Va ton. 126.00 - —
C grade, tankcars, same basis. ton. 124.50 - —
37 grade, tankcars, same basis. ton. 153.00 - —
Urethane, USP, dms. lb 1.45 - —
Uva-ursi leaves, bls. lb 12 - .14

V

Valerian root, Belgian, bgs. lb. .35 - —
Indian, bgs. lb. .27 - —
dl-Valine, dms., works lb. 21.00 - 27.50
Valonia beards, 40-42% tannin, bgs., ex dock ton. 86.00 - —
cups, 28-30% tannin bgs. ex dock ton. 64.00 - —
extract, powd., 63% tannin, bgs., exdock, duty extra lb. .09¾ - —
Vanadium pentoxide tech., dms., works lb 1.28 - 1.33
Vandyke brown, bbls., works lb. .09½ - .12
Vanilla beans, Bourbon, tins lb. 8.75 - 9.00
Mexican, cuts, tins lb. 7.50 - 7.75
whole, tins lb. 8.25 - 8.50
Tahiti, cs lb 7.00 -
Vanillin, ex eugenol, 1000 lbs. or more lb. 2.85 - 2.95
smaller lots lb 6.90 - 7.25
ex lignin, dms., 100-lb. lots lb. 3.10 - 3.20
smaller lots lb. 3.40 - —
Venetian red, jobbing, bgs., works. lb. .0475 - —
20%, bgs., works lb. .0525 - —
25%, bgs., works lb. .0575 - —
30%, bgs., works lb. .06 - —
35%, bgs., works lb. .0625 - —
40%, bgs., works lb. .0675 - —
Vetiver oil, Bourbon, cns lb. 11.75 - 11.90
Haitian, cns lb. 9.25 - 10.00
Java, cns lb. 18.50 - 20.00
Victoria blue toner, molybdated, PMA, 250-lb. bbls., dlvd. N. of Tenn. and N. C., E. of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis lb. 4.50 - —
Tungstated, PTMA, bbls lb. 5.55 - —
Victoria blue toner, dlvd., prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.), Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equalized with Chicago.
Vinyl acetate monomer, 55-gal. dms., c.l., works lb. .19 - —
l.c.l., works lb. .20 - —
tankcars, works lb. .16½ - —
tanktrucks, less than 4,000 gal., works lb. .17½ - —
n-Butyl ether, tech., dms., l.c.l., works lb. .35 - —
Chloride monomer, tanks, works lb. .11 - .13
Ether, USP, anesthesia, bots., 50 c.c., hospitals bot. 1.12 - —
75 c.c. bot. 1.50 - —
tech., dms., c.l., works lb. .26 - —
l.c.l. works lb. .28 - —
tanks, works lb. .25 - —
Ethyl ether, tech., dms., works, lb. .30 - —
Isobutyl ether, tech., dms., l.c.l., works lb. .35 - —
Methyl ether, cyls., works lb. .30 - —

Cylinders are sold outright, or if shipped against deposit, a free period of 60 days is allowed; and if empties are returned prepaid and in good condition within that period, full refund is made.

Propionate monomer, dms., c.l., dlvd lb. .49 - —
l.c.l., same basis lb. .50 - —
tanks, same basis lb. .47 - —
Trichloride (see Trichloroethane).

—Continued on page 56

PFIZER ANTIBIOTICS–HYDROCORTISONE–CAFFEINE

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For your topical preparations, you can order *Pfizer Bulk Hydrocortisone* as the alcohol or the acetate, in either regular or micronized form. Important new specialty pharmaceuticals are being formulated today by combining this anti-inflammatory steroid with antibiotics such as neomycin, polymyxin and bacitracin.

When you formulate products with antibiotics, hydrocortisone, caffeine, Pfizer can help you, not only with the most convenient forms to fit your production, but also with the latest application data. Call your Pfizer salesman for the products mentioned above, and also for penicillin, streptomycin and dihydrostreptomycin.

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For Better Foreign Service

Even though nothing else of value should result from his good-will, good-look, and good-sense visit to African and European countries more or less closely surrounding the bomb-nest in the Middle East—there is no reason to expect any such paucity—Vice-President Nixon will be highly deserving of public acclaim as he goes about the reforms which he has come to regard as imperatively demanded by what he learned about the performances of the foreign services, diplomatic and informative, of the United States. There has been a great improvement in that direction in the current century, especially since the mussing-up that came after the close of World War I. But, this country does not have the quality of foreign service which it needs in its world position of today.

There are exceptions, of course, but there is still a clear need that those in the upper echelons measure fully up to the definition in a pamphlet recently issued by the Department of State—"an extraordinary man who executes American policy abroad"—some of the best "men" in that respect recently have been and are women. But, Mr. Nixon was not drawing upon a prejudiced imagination when he referred to some of those "extraordinary" men as "corn balls."

Five important ambassadorial appointments are currently in course. They all are reported to have been cleared under administration investigations—as to security. It is good to learn that all the appointees are career officers of more than ordinary experience. They should be qualified to "execute American policy abroad." Of course, there must in many instances be some question of whether that policy fits the things with which the executing envoy will be called upon to deal in any number of areas of political, commercial, or social relations. It is most important that he know what to do, as well as that in the doing he follow Mr. Nixon's advice to act normal, friendly, and natural—characteristics which all too often are swept off by a blast of pomp and protocol or affected in unpredictable ways by recourse to cocktails and ceremonies, usually the outgrowth of competition in personal popularity.

It will be good for the United States if there emerges from Mr. Nixon's reformatory endeavors a studious consideration of the long intermittently flowing and ebbing of the proposal that this country establish an academy for training in foreign service and relations. A new bill with that purpose has been before congress for several months in the current session.

The most desirable and necessary progress in that direction will come through the project's getting adequate attention in respect of the commercial aspects of the services and relations. That is why businessmen should interest themselves actively in the promotion of the project. At the same time and collaterally with its progress, they should work for a better definition and distinction with relation to the respective and relative roles of the State and Commerce departments in connection with trade relations. The commercial and social aspects of foreign relations and participation in international activities in connection with world problems are far more potential than the political aspects as contributors to peaceful and profitable international relations. There is a need for a United States academy of foreign service and relations under existing world conditions and circumstances. It must be expected to grow as those influences become—as they must—more numerous, more onerous, and more confusing. Business will profit from—or pay for—the consequences. It should, therefore, have, take, and fill the biggest part in all preparatory programs.

Areas of Educational Advice

For those who are in any way concerned with the role and responsibility of industry and other divisions of business in connection with the development of better educational service in this country there will be much of interest in the processes, the progress, and the results of the latest step in the aid-to-education activities of the Manufacturing Chemists Association. This step involves the appointment of two advisers with special educative qualifications, backgrounds, and experiences. The association's announcement has it that the new advisers will devote special attention to work on its program for teachers and students of senior high-school chemistry.

The chemical manufacturers' group has been developing its educational program for about two years under the supervision of a director with a doctorate degree, assisted and guided by an advisory committee of twenty-two members who have executive positions in the industry and can be expected to know what it needs in educational qualifications of personnel. An idea of the objectives of the program can be got from the purpose of the association to present six medals and awards at its annual meeting in June for "outstanding teaching of chemistry at the undergraduate level in American colleges and universities." It is interesting to note that, to be eligible for nomination for such recognition, a teacher must have had at least fifteen years' service in that field. The newer step in the direction of pre-college teaching is in line with clearly recognized needs.

Because the latest development in the MCA program has to do with advice from educators to the industrial organization, a necessity for adequate correlation and coordination must be expected. The growing general belief is that the greater need is for advice to educators which would enable them better to meet the needs of all divisions of business. It is of pertinent interest in that connection that one of the leading colleges in the middle states, in setting up recently a board of industrial advisers in a cooperative activity, selected a chemical representative whose experience has been mainly in sales operations rather than scientific or technical, even though the cooperative project is in technical training.

Students of the matter forsee a big need for fundamental changes in the educational service of business as the development and application of automation proceed. They are not, however, yet ready to take a decisive stand with respect of their belief that there is already a serious need for a better teaming up of instruction in the social sciences with that in physical courses in order that there will be at least as much training—if not basic education—in the moral and ethical areas of human relations as there is in the technical areas of human activities. Thinkers of that school are taking serious note of such things as the recently reported operations of a group of youthful car thieves who were applying knowledge of how to start a car without using an ignition key which they had acquired in courses in automotive engineering. They find still more reason for concern in this recently published United Press item from Detroit:—

Three teen-age boys admitted to police yesterday they used a Christmas chemistry set to build the bombs whose blasts rocked the city's East Side seven times recently. The boys, aged 12, 14 and 15, told officers: "We all like science."

The last four words in that item set up a real problem in advice and action for the Manufacturing Chemists Association in the direction of public service and relations.

Outlook in Employment Relations

It is anybody's guess what effect the congressional probing of racketeering in certain segments of organized labor will have on the administration's contemplated campaign to revise the Taft-Hartley act. It is everybody's current utterance that it is about time that congress—in its big new role of doer of more and more of what rightly belongs to the Department of Justice—should be finding out whether pay or profit is the primary force in the boosting of the price of everything. There will be more of the same when coal miners get their next raise April 1 and the price of coal is given another hoist.

So, there is much to think about in the recent declaration by the head of the steelworkers—"that it is high time that labor and management stopped playing the hero and villain roles in respect to each other and assumed the weight of responsibilities thrust upon us in a sober, intelligent, and unselfish fashion. Peace of the entire world needs our joint effort; the welfare of its people demands it."

There is more than a little opportunity to do something useful in the development of desirable and necessary management-labor relations by other than political means through cooperative consultation under properly qualified guidance. There is a big and pressing need for the setting up and utilization on a nationwide scale of mediums for such consultation in the manner of the Rutgers Institute of Management-Labor Relations. There is an equal need that all who can arrange to do so attend the tenth anniversary conference of the Rutgers organization which will be held May 14 in New Brunswick, New Jersey.

Management and labor can get together for their own good and that of the general public which they serve. They can have, as in the Rutgers conference, participation by representatives of the public. It would be well and wise in many ways for them to do so.

One of the movements for amendment of the Taft-Hartley act, proposed to congress by the Secretary of Labor, although aimed at conditions in the construction industry, could result in general improvement of the law's application to relations in all industries which worked out and applied their own systems of relationships. It would bring recognition of groups of employers banded together for purposes of bargaining with the unions in any industry. It would eliminate the statutory requirements of elections on union representation where employers and unions had a "historical" bargaining relationship. And it would legalize prehire wage contracts.

Developments along such lines should be studied and pushed in management-labor relations conferences throughout the country. Employment relations are one of the most important among the many matters the handling of which is unwisely being left or shifted far too largely to government.

Washington Talks It Over

Gordon Gray Takes Over at Office of Defense Mobilization But Refuses to Play the Part of a New Broom.

By Ralph L. Cherry
Chief, OPD Washington Bureau

The Office of Defense Mobilization has a new director, Gordon Gray, who took office last week as successor to Arthur S. Flemming, but Mr. Gray is not going to play the part of the new broom.

He says he is taking over the office with no preconceived ideas on how things should be run at the agency, and there will be no wholesale reversal of Mr. Flemming's policies. This is not to say that there won't be any deviations, but such changes as occur will be in response to a situation requiring changes in direction.

It isn't likely that any important actions will emanate from the agency for some time because Mr. Gray is spending all his time boning up on the many problems he must eventually face. These include some important questions on imports threatening industries important to defense, not the least being the matter of oil imports.

Also, there is the matter of continuing the program of subsidizing the mining of tungsten, fluorspar, asbestos, and columbium-tantalum. The administration would like to slow down on the purchases of these materials for the stockpile. A $30 million appropriation for financing the program during the last half of the current fiscal year is still deadlocked in congress.

Creases for Cottons Studied

The crease-holding qualities of some of the newer synthetic fabrics may find an able competitor in cottons if the Department of Agriculture can find a way of applying its discovery to cotton garments with standard drycleaning equipment, The department has just entered into a research contract to develop a practical means of doing this.

The treatment now under development involves application of a resin finish to cottons which gives them crease-holding as well as wrinkle-resistant properties. The resin formulation used is a combination of a reactive type resin (dimethylol cyclic ethylene urea) and acrylate thermoplast, two catalysts, a silicone emulsion, a softening agent, and water. The finish is not applied until after the garments to be treated have been made. Thus seams and pockets can be ironed flat, and pleats and creases can be permanently set where they are needed.

Under the new research contract, the department hopes to bring the development up to the point of commercial use by developing a method, using commercial drycleaning equipment, to apply the resin and cure the finish.

AEC Sets Up N.Y. Library

A classified depository library has been established by the Atomic Energy Commission at its New York operations office, 70 Columbus avenue, to serve the needs of access permittees and commission contractors in the area. The library is the first of a number of such depositories planned for various regions.

Persons wishing to use the library facilities should apply in advance of their visit. In the case of access permittees, this can be accomplished by forwarding a copy of form AEC-403 to the office administering the permit. Contractors are required to file form AEC-277.

The documents in the library are for reference purposes only. Information on the price and source of individual reports will be available, however.

Heavy Chemicals

As the beginning of the second quarter drew closer, it appeared that chemical prices would hold the line with few exceptions. Producers would have liked to raise prices for some materials, but the present state of the market was such that buyer resistance had to be taken into consideration. Current consuming demand at best is classified as hand to mouth, and consumers apparently are trying to keep inventories as low as possible.

Demand for the alkalies was spotty during the week. Chlorine was in free supply, and consumers could have gotten as much as they needed with little delay.

While steel production figures have been below those registered for the final quarter of 1956, large volume output has continued to account for heavy withdrawals of the mineral acids against contract.

Nickel chemicals continued in tight supply. Currently, suppliers were in the throes of working out a new allocation system. This situation was expected to cause some confusion before it was finally worked out.

Sodium silicofluoride continued in good supply, and producers reported that they had stocks on hand for immediate shipment to consumers. In view of the past supply position for this material, this was deemed a highly unusual occurrence.

April 1 Price Advances

Barium carbonate, $2.50 per ton.
Barium chloride, anhyd., $4 per ton.
tech., cryst. 20c. per cwt.

The American Paper and Pulp Association reported production for the week ended March 16 at 95.0 percent of theoretical capacity, as compared with the revised figure of 96.8 percent for the previous week, and 103.8 percent for the corresponding week of last year.

Acids

Chromic—The tempo of automobile production was not comparable to that of last year at this time. Consequently, platers' demand for chromic acid was correspondingly down. Nonetheless, business was said to be going on at a satisfactory level.

Hydrochloric—Although a mild decline has been witnessed in production of chlorinated organics, output of byproduct acid has continued quite heavy.

One factor in large volume byproduct acid output has been stepped-up activity among pesticide manufacturers, which has partially offset slight declines registered in production of other synthetic organics.

Prices in the south and southwest, where most of the byproduct muriatic is produced, were considered relatively stable. Good quantities were reported moving into oil fields, owing to increased output there as a result of the Suez crisis.

Quotations in the New York metropolitan area could have been shaded in firm bids for large lots, as a sizable amount of byproduct acid reaches the area in direct competition with other grades of hydrochloric.

Phosphoric—Fertilizer production has been increased in anticipation of the spring planting season. As a result, there has been heavier call for phosphoric acid.

Food grades were moving at routine levels at present, but beverage demand is expected to increase for the spring and summer trade.

Sulfuric — Demand continued active from several quarters, including steel, rayon (synthetic detergents, alcohol manufacture and pigments. Producers felt that while actual business volume was about equal to that of last year, consumers were making purchases on shorter notice.

Steel production last week was estimated at 2,392,000 tons, or 93.5 percent of capacity, according to the American Iron and Steel Institute.

Production for the previous week amounted to 2,401,000 tons, or 93.8 percent of capacity. Actual output a year ago last week totaled 2,449,000 tons, or 99.5 percent of 1956 capacity.

Bases and Salts

Aluminum Chemicals—At present, no price changes are contemplated for calcined alumina or aluminum hydrate. Supplies were ample to fill current needs. Buying interest was chiefly hand to mouth.

Price Trends

Advanced
None.

Reduced
None.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	March 23, 1956
104.14	104.14	104.27	101.17

For Current Prices See Page 9

Caustic Soda—Reports varied as to the status of current business. It was generally conceded that supplies were plentiful. Demand was slow to active, depending on reports of individual producers.

Export business was reported good for long term negotiations, but poor for spot business, owing to the chronic dollar shortage. Latin America continued active in the market, owing to the continuing Suez tieup and resulting shipping shortages.

Chlorine—It was generally agreed that this market was quite a bit slower than during the final quarter of 1956. Production has been adjusted accordingly.

It was pointed out that the first quarter of each year is generally the weakest in the overall pattern of chlorine consumption. However, business is expected to show a marked upswing during the next few weeks.

Reasons for the anticipated increase in demand include heavier pesticide production, greater use in water and sewage treatment, and more pronounced application in bleaching.

Ferric Chloride—Market was quiet last week, with prices expected to continue unchanged for all grades. Most recent change was in sewage grade in tankcars, which was advanced to $3.75 per hundred pounds effective February 20.

Manganese Dioxide—At present, there was no sign of easing in the current high price of $144.50 per ton for imported African ore in bags, 50-ton lots.

Earlier this month, Moroccan ore was increased to $134.50 per ton in paper bags, same basis. The sharp increases have been brought about mainly because of the tight shipping situation arising from the Suez crisis.

Nickel Chemicals—These materials remained in tight supply. This position was merely a continuation of the market situation which has prevailed for several years.

Currently, it was reported that suppliers are in the midst of trying to work out a new allocation system for the various nickel salts. At present, the system is said to be in such a state of flux that nobody yet knows quite where he stands in relation to available supplies.

Soda Ash—The market picture was brighter last week for both light and dense ash. A noticeable pickup has occurred in demand for use in the glass industry, particularly from bottle makers, who are in the midst of preparations for the summer beverage trade.

Light ash business has improved owing to the return to production of several large aluminum potlines in the northwest. Previously, the aluminum industry in that region had been sharply curtailed due to lack of hydroelectric power.

Sodium Bicarbonate—Business continued active. Prepared food mixes continued to account for large volume shipments of material. Other end uses were moderately active for immediate needs.

Sodium Silicofluoride — This material has been in relatively free supply for some months now. Previously, sharply curtailed phosphate production during the first six months of last year had been responsible for low silicofluoride output.

However, during the last few months, with resumption of operations on a more normal scale in the phosphate industry, production of silicofluorides has been such that supplies have appeared in the hands of producers for the first time in years.

Sulfur—In December, the sulfur industry produced 534,088 long tons of native

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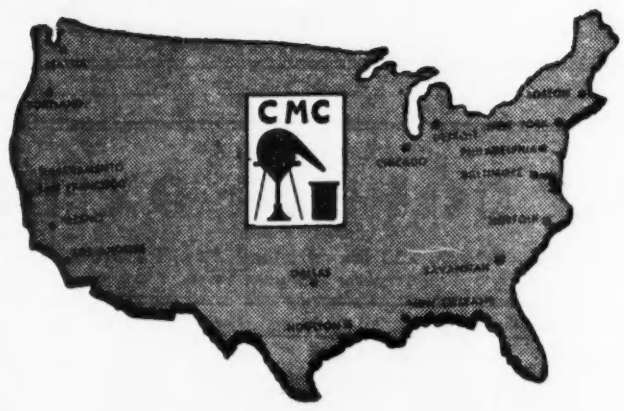

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Heavy Chemicals

sulfur and 43,750 long tons of recovered sulfur in the United States, according to the Bureau of Mines.

Output during 1956 reached record totals of 6,427,229 long tons of native sulfur and 480,980 tons of recovered sulfur, increases of 12 percent and 20 percent, respectively, over the previous year.

The following figures represent production, shipments and stock of sulfur of a purity of 97 percent or greater during specified periods in the United States, in tons.

	December	*November*
Native production	534,088	514,772
Shipments	467,310	376,745
Sales*	449,666	368,370
Stocks†	3,936,450	3,852,028
Recovered production	43,750	39,580
Shipments	43,860	38,386
Sales*	43,461	39,360
Stocks†	119,446	119,157
	1956	1955
Native production	6,427,229	5,743,344
Shipments	5,699,598	5,838,851
Sales*	5,671,977	5,790,166
Stocks†	3,936,450	3,181,198
Recovered production	480,980	401,650
Shipments	468,226	404,223
Sales*	481,801	400,125
Stocks†	119,446	120,267

* Calculated from production and change in stocks during the period.

† Producers' stocks at mines or plants, in transit, and in warehouse at end of period.

Nonferrous Metals

Copper—Market was fairly quiet. Primary metal was held by producers at 32c. per pound, delivered US destinations.

The following figures supplied by the Copper Institute, show production, shipments, and stocks of copper metal, in tons:

World	*February*	*January*
Production:		
Crude primary	235,559	240,970
Secondary	10,426	15,514
Refined	242,780	256,729
Shipments	214,796	263,014
Stocks	369,956	344,972
United States	*February*	*January*
Production:		
Crude primary	92,242	94,873
Secondary	8,790	14,683
Refined	134,119	139,150
Shipments	101,565	119,925
Stocks	136,330	118,564

Mercury — Market continued quiet. Metal was held at $255 to $257 per 76-pound flask, spot.

Silver—Bullion was quoted unchanged at 91⅜c. per troy ounce, spot, on Friday.

Tin—Market moved in a narrow range during the week. Metal ended about unchanged, at $1 per pound, spot, on Friday.

Mercury Buying Guarantee Extended to 1958 by ODM

The Office of Defense Mobilization last week authorized the General Services Administration to extend the mercury purchases guarantee program through 1958. The action will permit the acquisition of up to 50,000 flasks at a guaranteed price of $225 a flask. A total of 30,000 flasks may be acquired from domestic production, including Alaska, and 20,000 flasks from Mexico.

Under the current program, authorized in July, 1954, the government has guaranteed to purchase up to 200,000 flasks of mercury at $225 a flask through December 31, 1957.

Pfizer Using

—Continued from page 5

the growth of a free enterprise economy. The principle of providing shareowners of our great businesses with the facts they must have to make their individual investment decisions is embedded in our corporate way of life."

Discussing the purpose of the widespread circulation of the report, Mr. McKeen said that the company, like many other corporations, has for several years distributed its annual report beyond its shareholder group and the investment community.

"The report," he asserted, "plays an important role in the dissemination of product information, in our personnel recruiting activities, and in our overall public relations program. Considering the fact that we are making multiple use of a single publication involving a single preparatory effort and a single press run, we feel that we have economically achieved a number of important shareholder and public relations objectives."

"It is our hope that this report will not only benefit Pfizer but will also be reflected in a better public understanding of how our corporate free enterprise system operates," Mr. McKeen concluded.

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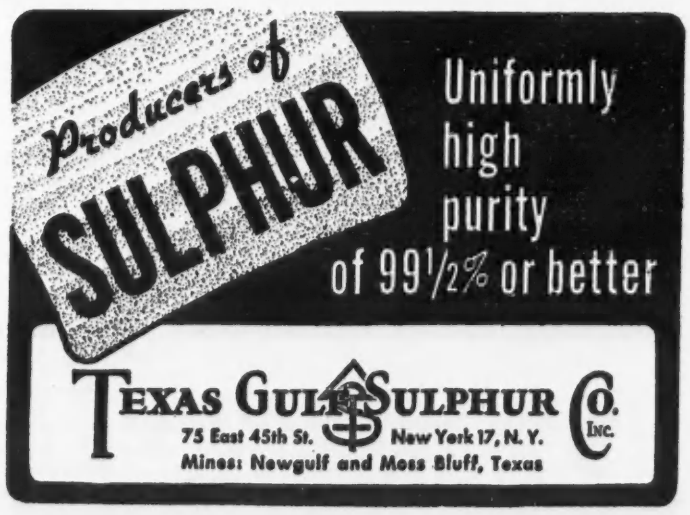
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Phthalocyanine Blue Toner Is Added to Cyanamid Line

"Cyan Blue Toner XR 55-3760," designed primarily for the plastics, rubber and floor covering industries, has been added to its line of phthalocyanine blue pigments by American Cyanamid Company, New York.

The new pigment is said to provide ease of dispersion and good strength development even under adverse conditions of milling.

Michigan Alkali Sets Up Two Sales Offices in South

Michigan Alkali Division of Wyandotte Chemicals Corporation, Wyandotte, Mich., will establish two new sales offices in the south—the southeastern district office at 46 Fifth street, N.E., Atlanta 5, Ga., and the southwestern district office at 304 National Bank Building, Baton Rouge, La., effective April 1.

Chemical Industry Ass'n To Hear *Fortune* Editor

Perrin Stryker, member of the board of editors of *Fortune* magazine, is scheduled to address the April 2 dinner meeting of the Chemical Industry Association on "How to become an executive."

The meeting, to be held in the Chemists' Club, New York, will be the annual guests' night for the CIA. Wives and women guests are invited to this meeting.

AZI to

—Continued from page 7

president and general manager, Southern Galvanizing Company, on job shop galvanizing.

Also W. P. Carlin, economist for Republic Steel Corporation on mill galvanizing; Maurice Van Loo, director paint research, Sherwin-Williams Company, on zinc oxide for paints; R. P. Dinsmore, vice-president, research and development, Goodyear Tire & Rubber Company, on zinc oxide for rubber; H. L. Young, vice-president, American Zinc Sales Company on rolled zinc and zinc anodes for cathodic protection; and R. Lewis Stubbs, director, Zinc Development Association, London, England, on zinc in the United Kingdom and Europe. S. D. Strauss, vice-president for sales, American Smelting and Refining Company will serve as panel moderator.

The second panel, which will meet the morning of April 26, will comment on the problems raised by the first panel as it discusses "A Course of Action for the Zinc Industry." Panel members will consist of the executive committee of the American Zinc Institute and the institute's executive vice-president, John L. Kimberley.

The annual meeting will open at 9:30 a.m. April 25 with a joint session involving the Lead Industries Association and the Galvanizers Committee. Presiding will be F. S. Mulock, president of American Zinc Institute and president of U. S. Smelting, Refining & Mining Company.

The major speakers will include Dr. J. Zimmerman, editor-in-chief, *Daily Metal Reporter* on "Current Market Outlook —Lead and Zinc"; R. H. Mote, chief, branch of base metals, Bureau of Mines on "World Supply—Lead and Zinc"; and R. Hendricks, vice-president in charge of sales, Consolidated Mining & Smelting Company of Canada, Ltd., on "World Consumption—Lead and Zinc."

The American Zinc Institute will meet in open session at 2 p.m. for the special consumer panel discussion.

On April 26, the institute will meet again for the announcement of the election of AZI officers, the treasurer's report, and the AZI annual report. W. M. Pierce of New Jersey Zinc Company will speak on "How Research Can Help the Zinc Industry." He will be followed by the second panel discussion on "A Course of Action for the Zinc Industry."

Vickers to

—Continued from page 5

Chicago; Detroit, Mich.; Louisville, Ky.; St. Louis and Kansas City, Mo., and Wichita, Kans.

The Udex BTX petrochemical plant is the latest move in a Vickers program of expansion which began in 1952 with the completion of a $500,000 pipeline from the Vickers refinery at Potwin, to the Great Lakes Pipe Line in El Dorado, Kans. This link enabled the firm to move products as far north as Minnesota and the Dakotas.

The chemical raw materials derived from the plant will be used extensively in the production of synthetic rubber, plastics, medicines, food preservatives, synthetic resins, explosives, paint and lacquer solvents and in certain synthetic fibers used in the manufacture of textiles.

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SAACI Schedules Five Golf Outings This Year

Five golf outings have been scheduled for 1957 by the Salesmen's Association of the American Chemical Industry, according to Vincent L. Rebak, New York district sales manager of Grace Chemical Company, New York, SAACI president.

The first outing will be held Tuesday, May 14, at North Jersey Country Club, Paterson, N. J. Other outings will be held Thursday, June 6, at Huntington Crescent Club, Huntington, L. I.; Tuesday, July 9, at Bonnie Briar Country Club, Larchmont, N. Y.; Monday, August 5, Tamarack Country Club, Greenwich, Conn., which will feature golf and a clambake, and Tuesday, September 10, at Hackensack Country Club, Oradell, N. J.

Arthur C. Curran of Meer Corporation, New York, is chairman of SAACI's golfing committee.

Phosphate Measure

—Continued from page 3

end. It is not needed to provide adequate reserves and it will not encourage the mining of additional quantities of phosphate, but will encourage exploitation of the public domain in a manner not in conformity with good conservation practices, it was added.

Mr. King explained that he feared the lifting of the ceiling would induce a rapid skimming off of the most accessible portions of the deposit by encouraging strip mining operations.

"It must be kept in mind," he said, "that in surface mining, beginning as it does 'at the grass roots' and without expensive or elaborate preparation, the operator has a free choice as to how far down he will follow the ore. Since the lowest cost rock is found at zero cover, and under the commonly found structural and physiographic situation, increases for every dip down from that zero cover, it becomes immediately apparent that he can elect to 'skim off the cheap material' and his temptation to practice this 'high grading' will be only controlled by the total amount of strike length he holds under lease. Other things being equal, we would suggest that this would be twice the temptation if he is now given twice the permissible acreage that this bill intends."

Monsanto Defends Legislation

In defense of the legislation Edwin J. Putzell, jr., secretary of Monsanto Chemical Company, sought to show that the leaseholders of phosphate lands are not being treated by congress with the same degree of consideration as are leaseholders of other lands. Potash lessees are permitted to hold 28,160 acres in one state, he said; a sodium lessee, 15,300 acres in one state with no limitations as to the number of states; oil and gas lessee, 46,080 acres in one state with no limitation on the number of states.

"This in spite of the fact that the known resources of phosphate are many times greater than those of potash or sodium minerals," he said.

Mr. Putzell explained that Monsanto's Idaho operation, which consists entirely of strip mining, uses only the low grade ore and because of the many millions of dollars invested, it requires not only substantial reserves of ore to warrant the initial installation, but to permit future expansion. The high investment cost, he noted, for practical purposes, rules out duplication of plant operations.

He said that in his judgment, the ends of conservation and the proper development of ore in federal lands would be served by encouraging expansion of western phosphate activities through approval of S. 334. The advent of the electric furnace phosphorus industry in the west only eight years ago, has made it possible to use and conserve low-grade phosphate rock which heretofore was largely wasted.

Methyl Butynol

—Continued from page 3

acetylene and acetone using a basic catalyst.

Both methyl butynol and methyl pentynol (also to be produced) reteain the triple bond of the parent acetylene, but are themselves completely stable and therefore present no handling and storage problems. In addition to the triple bond, both alcohols have two other points of reaction: at the hydroxyl group, and acetylenic hydrogen.

The plant will be the fourth to be built by Air Reduction on its 1,500-acre Calvert City site, assembled for its own and customers' use. The first was the National Carbide division's calcium carbide and acetylene generating plant, from which three customer plants and Airco's vinyl acetate monomer plant receive acetylene by pipeline, as will the new installation.

Jobs & People

American Mineral Spirits Company, Chicago—**William B. Richardson,** manager of Amsco's New England division, was honored at a banquet in Boston last week commenorating his twenty-fifth anniversary with the company.

Arnold, Hoffman & Co., Providence, R. I.—**Alan F. Mayer** has been assigned by Ahco to market development of newly established products intended for use by industries outside the textile field. **Bruce O. Dickison** has been made a salesman, replacing Mr. Mayer.

Dewey & Almy Chemical Company Division of W. R. Grace & Co., Cambridge, Mass.—**Paul W. Hatch** has been added to the sales forces of Dewey & Almy's organic chemicals division.

Monsanto Chemical Company, St. Louis, Mo. — **Elerington Saunders** and **Dr. Edward J. Griffith,** both researchers in Monsanto's inorganic chemicals division, have been promoted to the position of scientist in the division's research department. **Dr. John H. Payne** and **Dr. Joseph A. Brink, jr.,** of the division have been awarded Gaston du Bois awards for outstanding research accomplishments last year.

Nitrogen Division, Allied Chemical & Dye Corporation, New York—**Homer Dudley** has been named as sales supervisor for direct application materials in Nitrogen Division's Omaha, Nebr., district.

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Agricultural Chemicals

One dealer here suggested last week that the market would be particularly unresponsive to the recently announced April 1 price advances for urea and normal superphosphate. With stocks already topheavy, the dealer noted, and money scarce, it doesn't stand to reason that manufacturers will buy unless they can't possibly avoid it. He also noted that manufacturer's price schedules had in many instances already been posted and that the shift will entail revision of these in the face of buyers already unwilling or even unable to take material at the earlier quotes. The two pending price shifts noted are $5.00 per ton for urea and 40c. for normal superphosphate. However, in the instance of the later, the price change will not effect contract customers until the end of the agricultural year on June 1. In both instances producers cited growing costs of freight, labor and manufacturing as the reason for the change.

A further factor in this matter is that manufacturers have already indicated that they have no intention of entering a new year with heavy stocks as they were forced to do, of course, last year. The problem revolves about the complete uncertainty of the pending season. For the most part the feeling remains that the year will not be a good one. However, the full potential of soil bank aid and other factors bearing upon the agricultural picture is not known. Until these matters are defined, everyone appears to be approaching the market warily and buying only when absolutely necessary.

Price Trends

Advanced
None.

Reduced
None.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	March 23, 1956
110.21	110.21	109.99	110.78

For Current Prices See Page 9

April 1 Price Advances

Superphosphate, normal, 40c. per ton.
Urea, $5 per ton.

Animal and Plant Foods

Ammonium sulfate — Producers here claimed that stock of this material is declining as the result of deeping demand and sales. This includes both domestic and foreign demand, it was noted. Though sources have reported the decline in domestic usage of this material as compared with sales figures of some other agricultural chemicals. On the whole, however, this material reflects a general trend in the market as it moves more hopefully into the lower echelons of the seasonal demand period. Possibly, because hopes are limited, any excessive demand of any sort will be looked upon as a boom. However, there is little anticipation of this and a steady flow throughout the season will be considered an excellent sign in itself.

Animal Proteins—Movement was reportedly better last week, dealers here reported, though no price shifts in any direction were noted. However, seasonal demand has buoyed the market somewhat and supplies are loosening up somewhat with stocks deminishing from previous heavy states. Blood stood fast at the price level of the past weeks: $5.50 New York and $6.25 Chicago, while hoofmeal contained a relatively recent 25c. advance at $5.75 and tankage remained at $5 New York and $6.25 Chicago. In the fish meal and fishscrap markets, conditions were reported as slow with interest only mild.

Superphosphate — Price schedule advances in this material reflect the currently developing seasonal sales period in the agricultural chemicals market. The price of normal superphosphate will be advanced by a major producer on April 1. The new listing will be 40c. per ton higher than previously quoted. However, it was noted, the measure will not effect contract customers until June 1. Until that date, material will continue to be available to them at the previous listing of 88c. per unit of a.p.a. Though no other producers have announced to date of concurrent price advances, it is anticipated that the market will take this position throughout.

Urea—The advance in the spot listing of this material made two weeks ago by a major producer has taken hold and at least one other large producer has advanced listings (as of April 1) also. The price advance, a $5 per ton increase in the price of all solid urea products, applies to all f.o.b. prices, and is likewise applicable in cases where freight allowances are granted to meet competition.

The price increase according to producers, has become necessary because of increased labor, freight and manufacturing costs.

Pesticides

Producers of pesticides in 1956, according to a recent report, had their best year to-date. The manufacture of synthetic organic pesticides rose more than 10 percent above 1955 production for both domestic and export demand. Production in 1955, itself, it was noted, was nearly 10 percent higher than in 1951, the highest previous year. Whether production will be as good in 1957 will depend, of course, on agricultural developments during the coming season.

The recent pesticide inventory survey by the Department of Agriculture showed carryovers from the 1956 growing season in the possession of formulators of mixed goods generally to have increased less, when compared to 1955, than those owned by primary chemical producers. Formulators increased their stocks of the chlorinated hydrocarbon group (aldrin, chlordane, dieldrin, endrin, heptachlor and toxaphene) 20 percent, against and increase of over 90 percent in the hands of primary manufacturers; formulator stocks of DDT went up 46 percent and producer stocks 78 percent.

2,4-D—This herbicide is showing some strength, dealers and producers here reported. Both domestic and export sales, it was noted, have shown some advance in position. The domestic market, now in its ascendency, is acting as a good buoy, with the export market remaining the steady factor it has been for some time. The full nature of the pending season, of course, will depend upon developments in the farm belts and the Southwest and as there is such a strong uncertainty in this direction, it is questionable that any full information will be available for some time.

Ammonium Sulfate & Ammonia Liquor Data for December

The following information on production, sales and end-of-month stocks for ammonium sulfate and ammonia liquor covers data for October, November, 1955 and totals for the first eleven months of 1955 and 1956. The figures, according to the Bureau of Mines, are preliminary and are revised in final reports.

	Jauary, 1957 Quantity	% change	December, 1956	January, 1956
Production:				
Ammonium sulfate.....pounds	161,660,987	0.5	166,520,040	169,467,526
Ammonia liquor (NH_3 content).pounds	3,303,256	2.4	3,225,048	3,187,632
Sales:				
Ammonium sulfate.....pounds	188,603,713	9.6	211,819,525	162,223,272
Ammonia liquor (NH_3 content).pounds	1,987,016	3.8	1,915,075	1,923,345
Stocks, end of month:				
Ammonium sulfate.....pounds	341,675,353	7.3	368,582,822	413,882,511
Ammonia liquor (NH_3 content).pounds	3,199,447	6.1	3,014,480	3,596,346

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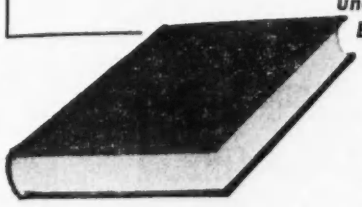

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Aliphatic Organics

Denaturing grade methanol in tanklots was increased by 10 cents per gallon by one company last week effective immediately. Another firm announced a similar increase in this material effective April 1 and said there was little doubt that the new schedule would be uniform throughout the industry by that date. Denaturing grade material has been moving in only limited volume, most transactions being conducted on a spot basis. Minimum quotations on blackstrap molasses declined another ¼ cent per gallon in the week ended last Tuesday, Agricultural Marketing Service reported, as buyers remained on the sidelines waiting to see whether the downward price trend would be sustained. New York quotations on blackstrap were meanwhile unchanged.

One producer said last week that he expected to "adjust" prices of methyl chloride refrigeration material, but nothing definite had been announced up to press time. This producer joined others in a move initiated two weeks previously to advance quotations on industrial methyl chloride ¾c. per pound effective April 1. It now appeared that on that date the increase would apply industrywide across the board for industrial methyl chloride moved in single-unit tanks, multi-unit tanks and cylinders, while material sold to refrigerator manufacturers and other consumers or service men remained unchanged in price up to this time.

Price Trends

Advanced
None.

Reduced
Molasses, New Orleans, ¼c. per gal.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	March 23, 1956
130.77	130.77	131.10	130.96

For Current Prices see Page 9

April 1 Price Advances

Allyl bromide, 7c. per lb.
Carbon tetrachloride, CP, ¾c. per lb.
tech., ¾c. per lb.
Ethyl bromide, 2c. per lb.
Methyl chloride, indust., cyls., ¾c. per lb.
tanks, multi-unit, ¾c. per lb.
single unit, ¾c. per lb.
Methylene chloride, ¾c. per lb.
Perchloroethylene, ¾c. per lb.
1,1,1-Trichloroethane, ¾c. per lb.
Tricholorethylene, ¾c. per lb.

Consumption of glycerine in calendar year 1956 topped that of the year previous and was second only to that of one other year. The complexion of this market meantime altered fundamentally. Volume of soap production, on a steadily declining trend for years, appears to have leveled out last year, and glycerine producers predicted that production of glycerine from natural sources would be at least as great in 1957 as it was in 1956. Total glycerine output set a new annual high in 1956. Prices here were generally lower last year. Firmer prices in Europe accounted for a marked reduction in U. S. imports during 1956, while export volume was essentially unchanged from that of the year previous. Current quotations on domestic glycerine were regarded as quite stable.

Sales volume for lactic acid has been steady since the 9 cents per 100 pounds increase put into effect last December 28 on edible grades. Most of this material formerly was moved in barrels, but nearly all of it was now moved in the new plastic-lined drums. There were wide variations in prices of edible material on a geographical basis, though much of the market was based on freight equalization with a producing point in Indiana.

Ethanol—Consumption of new specially denatured alcohol as a fuel amounted to 864,159 wine gallons in the fiscal year ended June 30, 1956, it was reported by the Alcohol and Tobacco Tax Division of Internal Revenue Service. No recycled alcohol was consumed for this purpose, and no alcohol was recovered from these operations.

The breakdown indicates that 489,950 wine gallons was used as airplane fuel, 2 wine gallons was used as motor fuel and 374,207 wine gallons was consumed in other fuel uses.

Laboratory and other experimental purposes accounted for consumption in the same fiscal year of 360,526 wine gallons of new specially denatured alcohol and 39,752 wine gallons of recovered alcohol. From these operations, 21,438 wine gallons of alcohol was recovered.

Some 124,891 wine gallons of new specially denatured alcohol and no recycled material were consumed during the fiscal year for use as a fluid, including 16,949 wine gallons consumed in cutting oils, none of which was recovered, and 107,942 wine gallons going into other fluid uses, including door checks, of which 2,633 wine gallons was recovered.

During the same period, the total amount of specially denatured alcohol used for all purposes was 259,712,061 wine gallons of new material and 147,949,788 wine gallons of recovered alcohol. From all operations, a total 149,217,167 wine gallons of alcohol was recovered.

Formaldehyde—Tariff Commission reported that production during December, 1956, on the basis of 37 percent formaldehyde by weight, was 107,918,168 pounds. That figure, while the lowest reported for any month in 1956 except last July, was sufficient to bring the total for calendar year 1956 to 1,338,877,896 pounds. By contrast, total output in calendar year 1955 was reported as 1,195,459,108 pounds (all the foregoing figures being stated on the 37 percent basis).

Glycerine—Consumption last year was in excess of that in 1955 and was exceeded in only one previous year.

Meantime, the complexion of this market was altered fundamentally. For one thing, the decline recorded in soap production in several recent years seems to have reached the leveling off point, and producers forecast that 1957 output of glycerine from natural sources would at least equal that of 1956. It was estimated that production in 1956 consisted of about 145 million pounds derived from natural sources and about 101 million pounds produced synthetically. Total output in 1956 set a new annual high and was about 7 percent greater than that for 1955.

Imports declined significantly in 1956 as prices firmed up in Europe. Exports were steady at about the same level of volume reported for the year previous.

While chemicals generally were priced higher last year, 1956 quotations on domestic glycerine were lower than they were in the previous year.

Supply was abundant at year's end, equivalent to more than three months' supply at current rate of consumption. It appeared that there would be more than enough glycerine to satisfy consumer demand through 1957.

The current price structure was regarded as quite stable.

Consumption in January of this year appeared to be more than 2 million pounds in excess of that in the month previous but more than one million pounds less than that reported for January, 1956.

In January, 1957, production of 21,360,000 pounds and imports of 1,603,000 pounds were added to producers' stocks that amounted to 67,247,000 pounds at the beginning of the month, bringing the total amount of material made available during the month to 90,210,000 pounds. Subtracting 788,000 pounds exported, the net available to the domestic market was 89,422,000 pounds. Since stocks at producers' plants at the end of the month added up to 67,467,000 pounds, apparent consumption in the domestic market during this period was 21,955,000 pounds.

In December, 1956, producers' stocks at the beginning of the period of 67,253,000 pounds were augmented by production of 18,615,000 pounds and imports of 1,901,000 pounds, bringing the total available during the month to 87,769,000 pounds. Of this, 857,000 pounds was exported, leaving a net 86,912,000 pounds available to the domestic market. Stocks at producers' plants at the end of the month were 67,247,000 pounds, indicating domestic consumption during the month amounting to 19,665,000 pounds.

In January, 1956, 23,285,000 pounds was produced and 3,369,000 pounds imported, which, with stocks at producers' plants at the beginning of the month amounting to 51,977,000 pounds, made a total 78,-

Aliphatic Organics

631,000 pounds available during that month. Less 303,000 pounds exported during the period, the net available to the domestic market was 78,328,000 pounds. Since producers' stocks at the end of the month amounted to 55,252,000 pounds, apparent domestic consumption during the month works out to 23,076,000 pounds.

Hexamethylenetetramine — Tariff Commission reported that production of hexamethylenetetramine dropped off to 2,007,836 pounds during December, 1956, the lowest figure given for any previous month since last July. Output in November, 1956, was put at 2,226,656 pounds.

The December figure brought the total for calendar year 1956 to 29,125,147 pounds, representing almost a 50 percent increase over the 20,007,249 pounds reported produced during calendar year 1955.

Lactic Acid—Sales volume has been steady since the new price schedule on edible grades, advancing prices by 9c. per 100 pounds, was put into effect last December 28. Nearly all this material was now moving in plastic-lined drums. Until a year or so ago, most of it was moved in barrels.

Current quotations ex warehouse in Brooklyn for material in drums, with freight equalized to New York, Philadelphia, Pittsburgh, Baltimore and Boston, were:

For 50 percent material, food grade, $17.80 per 100 pounds in carlots, $18.30 per 100 pounds for 20 drums or more, $18.80 per 100 pounds for 5 to 19 drums and $19.30 per 100 pounds for 1 to 4 drums.

For 80 percent material, food grade, $30.30 per 100 pounds in carlots, $30.80 per 100 pounds for 20 or more drums, $31.30 per 100 pounds for 5 to 19 drums and $31.80 per 100 pounds for 1 to 4 drums.

Prices were 7c. per 100 pounds higher for material in barrels.

Quotations varied widely with geographical location. For much of the country, they were stated on a freight equalization basis against a producing point in Indiana.

Methanol—One company put into immediate effect a 10c. per gallon increase in the tanklots price of denaturing grade methanol, and another announced an identical advance effective April 1. Trade sources said it seemed almost certain that the new schedule would be effective industrywide by that date.

New quotations were 85c. per gallon in tanklots, delivered to all zones, and $1 per gallon in carlots, drums, delivered, the drums included.

This material was moving in relatively little volume and was traded in large part on a spot basis, producers reported.

Methyl Chloride—One producer said last week that he expected to "adjust" prices of refrigeration material, though no change had been announced up to press time. This same producer did announce that he was joining the move initiated two weeks previous to advance industrial prices ¾c. per pound across the board effective April 1.

The new schedule on industrial methyl chloride, now slated to become industrywide April 1, on a freight equalization basis, quotes 12¾c. per pound for material in single-unit tanks, 16¼c. per pound in multi-unit tanks and 22¼c. per pound in cylinder lots.

Still unchanged at week's end were prices of 46c. to 48c. per pound for material moving to refrigerator manufacturers in cylinders, delivered basis, and 6c. per pound, delivered basis, for methyl chloride sold to other consumers or service men in cylinders. It was these prices that the one producer expected would be changed in the near future.

Molasses—Blackstrap declined another ¼c. per gallon at New Orleans in the week ended last Tuesday, Agricultural Marketing Service reported, as buyers appeared to be standing on the sidelines waiting to see whether the downward price trend would be sustained. Demand was slow at New Orleans, with supply adequate. The new price range was from 25½c. to 26c. per gallon at that point.

Trade in the south and at most midwestern feed mixing centers was generally confined to immediate and short-term requirements.

Prices were generally steady in the east and on the Pacific Coast. Demand was moderate and supply adequate at New York, where prices continued unchanged in the range from 28c. to 29c. per gallon.

Pentaerythritol—PE was moving rather poorly, trade sources reported. Slack seasonal factors, such as inactivity in house painting, were partly to blame, it was said. Producers pointed out, however, that alkyd resins and metal finishes, generally, were rather sluggish.

Only 4,811,284 pounds of pentaerythritol was produced in December, 1956, according to figures published by the Tariff Commission. Output in the month previous was 5,050,605 pounds. The December figure brought the total for calendar year 1956 to 62,278,677 pounds. Production in calendar year 1955 amounted to 65,110,317 pounds.

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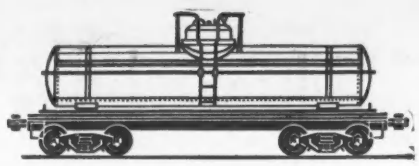

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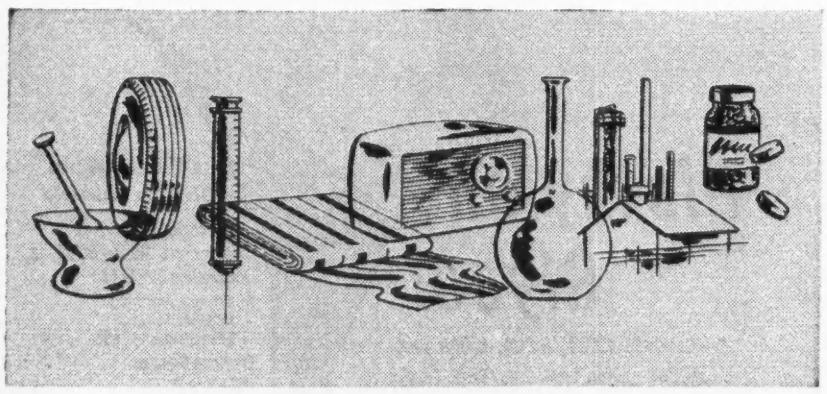

KOPPERS
COAL CHEMICALS

Coal Chemicals

Leading producers announced last week a reduction of 4½ cents per pound on tanklots of polymer grade, 99½ percent, styrene monomer effective July 1 next. The new schedule will provide differentials of 2½ cents per pound for carlots and truckloads, drums, 4½ cents per pound for less carlots and less truckloads, drums. In effect, the reduction will amount to 4 cents per pound on carlots and truckloads, drums, and 3 cents per pound on less carlots and less truckloads, drums. Trade sources said it appeared to be inevitable that the new schedule would be in effect industrywide by July 1.

Announcement of the decline in polymer grade styrene followed by some months an industrywide reduction on contract prices of rubber grade styrene monomer, 99 percent material, also effective next July 1, amounting to 4 cents per pound on material moved in bulk.

Imports of benzene in 1957 would be heavy, traders predicted, but would represent a substantial decline from the 66 million gallons of foreign material brought in during 1956.

M-p-cresols were weaker as demand for tricresyl phosphate remained poor, and low-boiling cresylic acids with high phenol content were a bit slow. Otherwise, acids were in fairly good balance.

There was some trading in low-boiling imported acids after a period of inactivity that lasted several months.

Phthalic anhydride continued to show some improvement, but the phthalic market was still disappointing to most producers.

American Iron and Steel Institute estimated that steel production in the week ended March 24 would amount to 93.5 percent of theoretical capacity, equivalent to 2,392,000 net tons of steel. By comparison, steel output came to 2,401,000 net tons in the week previous, 2,504,000 net tons in the comparable week in February and 2,449,000 net tons in the corresponding week one year ago.

Price Trends

Advanced
None.

Reduced
None.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	March 23, 1956
118.32	118.32	118.31	115.02

For Current Prices see Page 9

April 1 Price Advances

p-Phenetidine, 5c. per lb.
Salicylic acid, crude, 2c. per lb.
sublimed, tech., 2c. per lb.

Basic Products

Benzene—Domestic producers said that imports of benzene in 1957, while substantial, would be considerably less than those in 1956. Last year's imports were in excess of 66 million gallons.

The domestic market was characterized by freer availability of supplies. Demand was strong, however, and there was no question at this time of an inventory problem at the producer level. It was believed that inventories all along the line in distributive channels have been declining since December 15.

Production from cokeoven operations, still on the heavy side, has been curtailed by something like 7 or 8 percent in the past two months or so, as steel production has dropped off somewhat.

Cresols—Balance was fairly even for most isomers last week. Production capacity for the para, which was acutely short only last summer, was now abundant with respect to immediate and anticipated requirements. Ortho has been growing stronger by fits and starts and was expected to capitalize in the long run on market potentials now under research and development. Meta-para has fallen off somewhat on account of the weak current market for tricresyl phosphate.

Cresylic Acid—Most cuts were available in abundance. Meta-para was weaker on account of poor demand for tricresyl phosphate. Low-boiling acids with high phenol content were on the weak side also. Other cuts were in better demand.

The market for low-boiling imported material has come alive in recent weeks after a period of inactivity that lasted for several months.

Intermediates

o-Chlorobenzaldehyde — Prices were steady last week at quotations of long standing. On a works basis, or delivered to the New York metropolitan area, this material was offered in 500-pound drums at $1.05 per pound in truckloads and $1.20 per pound in less truckloads. In 50-pound drums, same basis, the price was $2 per pound.

p-Chlorobenzaldehyde—Prices of long standing were still in effect last week. On a works basis, or delivered to the New York metropolitan area, this isomer was

Aromatic Chemicals Output: December

Following are statistics based on data compiled by the Tariff Commission relating to production of certain aromatic chemicals during December and the month previous, with totals for the years 1955 and 1956. Figures representing cokeoven production of benzene, creosote oil, crude naphthalene and toluene are those previously published with other figures reported by the Bureau of Mines. Where no figure is given, it is because available data would have disclosed confidential information or because the data on hand were believed to be incomplete. Dyes are identified by color index or prototype number.

	December	*November*	1956 *Total*	1955 *Total*
Acetanilide, tech. and USP ....lbs.	259,475	.....	1,956,944	2,782,711
Aniline ....lbs.	10,090,052	10,649,683	125,233,736	131,998,703
Benzene, tar distillers ....gals.	3,663,668	4,111,562	35,580,814	22,090,302
Cokeoven operators ....gals.	17,767,486	17,069,627	179,083,882	173,956,039
Total from coal sources ....gals.	21,431,154	21,181,189	214,664,696	196,046,341
Petroleum operators ....gals.	9,941,257	9,989,653	113,775,363	104,969,439
Total from all sources....gals.	31,372,411	31,170,842	328,440,059	301,015,780
Creosote oil (100 percent creosote basis)				
Tar distillers ....gals.	10,822,073	9,055,974	94,230,839	91,772,022
Cokeoven operators ....gals.	3,633,548	3,145,477	25,836,797	32,337,382
Total ....gals.	14,455,621	12,201,451	120,067,636	124,109,404
Cresols, meta-para ....lbs.	1,505,948	1,424,295	15,364,846	20,663,045
Ortho-meta-para ....lbs.	788,029	651,735	8,236,339	11,138,500
Cresylic Acid, refined, all sources....lbs.	3,870,280	5,006,385	58,218,753	52,104,392
Dyes, C. I. 202, chrome blue black R..lbs.	.....	125,286	501,375	1,674,290
C. I. 581, direct black EW ....lbs.	869,375	473,248	5,172,441	5,924,483
P. 302, naphthol AS ....lbs.	.....	76,081	786,222	759,886
Monochlorobenzene ....lbs.	38,156,617	35,811,205	445,304,766	430,295,540
Naphthalene, crude, tar distillers....lbs.	22,676,413	26,112,757	202,186,038	260,260,657
Cokeoven operators ....lbs.	17,504,444	15,709,784	178,817,431	184,792,085
Total crude ....lbs.	40,180,857	41,822,541	471,003,469	445,052,742
Refined, tar distillers ....lbs.	6,544,284	5,917,727	79,671,686	92,811,141
Phenol, tech., and USP, all sources..lbs.	45,462,665	44,264,083	517,517,709	488,781,901
Phthalic Anhydride ....lbs.	27,092,559	25,040,836	315,492,092	347,310,587
Styrene, from all plants ....lbs.	100,148,201	101,410,668	1,110,903,009	1,011,857,133
Toluene, cokeoven operators ....gals.	3,487,373	3,363,274	37,199,524	38,272,169
From other sources ....gals.	13,964,743	12,794,423	139,445,432	148,710,989
Total from all sources....gals.	17,452,116	16,157,697	176,644,956	186,983,158
Xylene, from all sources ....gals.	12,249,014	11,208,820	127,796,555	117,578,399

Coal Chemicals

available in 500-pound drums at $1.95 per pound for four or more drums and $2 per pound for one to three drums. It was offered in 50-pound drums, same basis, at $2.50 per pound.

Cyclohexanol—Prices held steady last week, and producers were not expected to make any changes in the second calendar quarter. Tanklots were sold at 24c. per pound on a freight allowed basis.

Zone 1 drum prices were 26½c. per lb. in carlots and truckloads and 27½c. per pound in less carlots, less truckloads, freight allowed. Zone 1 comprises all continental US east of the eastern boundaries of Montana, Idaho, Utah and Arizona.

Zone 2 drum prices were 28c. per pound in carlots and truckloads and 30c. per pound in less carlots, less truckloads. Zone 2 comprises all states west of Zone 1.

p-Phenetidine—Effective dates of a 5c. per pound increase in the price of this material, erroneously reported in previous issues, were March 1 on spot business and April 1 on contract.

On a freight allowed basis, the new price schedule quotes p-phenetidine at $1.05 per pound on carlots and $1.08 per pound on less carlots.

Phthalic Anhydride—Demand was still disappointing, though it has improved steadily over the past two to three months. Forecasts took account of the fact that the automotive industry, a mainstay and bellwether for phthalic, was in a more stable position than it was at this time a year ago. On the other hand, trade sources were pessimistic about the news that steel production, somewhat reduced at present, was running ahead of new orders for steel.

Resorcinol—Use of resorcinol in manufacture of waterproof adhesives in demand for use in manufacture of corrugated paper box has built up this market considerably in the past year. Older applications, such as a number of pharmaceutical outlets, have held at steady volume. A number of promising potential uses have been under study. All in all, this market was much improved and still expanding.

Styrene Monomer—A 4½c. per pound reduction effective July 1 next on tanklots of polymer grade, 99½ percent, styrene monomer was announced last week by major producers. The new schedule provides differentials of 2½c. per pound on carlots and truckloads, drums, and 4½c. per pound on less carlots and less truckloads, drums. In effect the reduction will amount to 4c. per pound on carlots and truckloads, drums, and 3c. per pound on less carlots and less truckloads, drums.

The new price list quotes, on a freight prepaid basis, 16c. per pound for tanklots, 18½c. per pound for carlots and truckloads, drums, and 20½c. per pound for less carlots and less truckloads, drums.

The advance on polymer grade prices followed by some months an industrywide reduction, also effective next July 1, on contract prices on rubber grade, 99 percent, styrene monomer. Rubber grade material moving in bulk will be quoted at 16c. per pound after that date, 4c. per pound below the current price.

Trade sources said it appeared inevitable that the reduction on polymer grade prices would become industrywide by July 1 in view of the spread that would otherwise exist after that date between polymer grade and rubber grade quotations.

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ending March 24 was as follows:

Ammonia liquor	lbs.	931,247
Ammonium sulfate	lbs.	39,653,118
Benzene	gals.	3,544,748
Coaltar	gals.	17,423,340
Creosote	gals.	675,905
Naphthalene, crude	lbs.	3,770,050
Pyridine (2°C.)	lbs.	13,518
Toluene	gals.	781,046
Xylene	gals.	225,502

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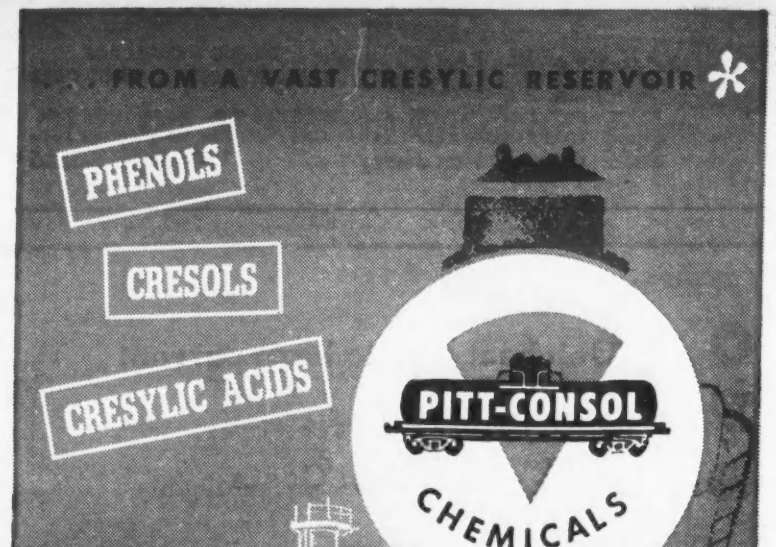
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Lilly Agricultural Division Set Up; Officers Named

Eli Lilly & Co., Indianapolis, Ind., has expanded its agricultural research program with the creation of an agricultural research division. Previously, agricultural research was part of the biochemical research division.

Dr. J. F. Downing, former head of the agricultural research department, has been named division director. He is responsible to Dr. J. A. Leighty, executive director of scientific research.

Dr. C. C. Leben, has been named head of the agricultural research department, and V. A. Thomas, head of the administration department at the Lilly Greenfield Laboratories, Greenfield, Ind. O. K. Behrens, director of the Lilly biochemical research division, will serve as consultant to the new division.

Anthraquinone Vat Dyes Are Produced by DuPont

Production of two anthraquinone vat dyes, "Ponsol Navy Blue 2B Double Paste" and "Ponsol Red Brown N Paste," has been announced by E. I. duPont de Nemours & Co., Wilmington, Del.

"Ponsol Navy Blue 2B Double Paste" is recommended for use in the production of full navies on cotton or rayon.

"Ponsol Red Brown N Paste" produces economical red-brown shades on cotton and rayon. It is said to be a good base for many brown shades and is a suitable shading component.

Obituaries

Harry A. Logan

Harry A. Logan, a founder and president of United Refining Company, Warren, Pa., died March 13 in that city. He was seventy-five years old.

Mr. Logan was also president of Emblem Oil Company, and a member of the board of directors of National Transit Company, Oil City, Pa.

Simon Lubarsky

Simon Lubarsky, former president of International Vitamin Corporation, New York, a division of American Home Products Corporation, died March 14 in that city. He was seventy-two years old.

Mr. Lubarsky, a pioneer in the vitamin and drug business in New York, retired in 1943 after thirteen years with International Vitamin.

Robert Bacon Arnold, retired research director of Virginia-Carolina Chemical Corporation, Richmond, Va., died March 19 in that city. He was seventy-six years old.

Floyd Morgan Barnes, retired vice-president and director of Procter & Gamble Company, Cincinnati, Ohio, died March 14 in that city. He was seventy-nine years old.

Arthur F. Corwin, retired vice-president and director of Socony-Mobil Oil Company, New York, died March 13 in New Rochelle, N. Y. He was eighty years old.

Jacob S. Coxey, jr., a founder and former president and chairman of Industrial Silica Corporation, Youngstown, Ohio, died March 19 in Hollywood, Fla. He was sixty-five years old.

Stonewall J. Jackson, executive in the export and sales division of Patterson Sargeant Paint Company, Brooklyn, N. Y., died March 15 in that city. He was sixty-four years old.

Johannes K. Petschow, chief chemist for Royce Chemical Company, Carlton Hill, N. J., died March 18 in Glen Ridge, N. J. He was fifty-nine years old.

Louis Jacob Quad, retired chief chemist of Arbuckle Sugar Refining Company, Brooklyn, N. Y., died March 13 in Plainfield, N. J. He was seventy-nine years old.

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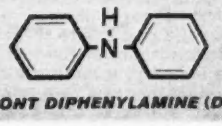

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Textile, Leather Chemicals

Moderate volume of business was reported in textile and leather chemicals last week. Consumers continued to restrict demand to prompt requirements and showed little interest in placing orders for later delivery. Prices were unchanged for most items, but with competition keener price shading was more in evidence in some materials for sizable quantities. Trading in potato starch was spotty, and confined to actual needs. Grinders in Maine maintained quotations at former levels, while Idaho mills raised carlots one quarter cent per pound effective April 1. Recent price declines in egg derivatives increased buying interest in flake egg albumin and egg yolk. New business in tapioca flour was reported light, but deliveries against contracts were absorbed in good volume. Offers of new crop Brazilian were still scarce for shipment, but were expected to increase some time in April.

Lower cost of quebracho, wattle and cutch extracts has not as yet improved trading, though consumer interest was more active. Wattle bark also was inactive, despite recent sharp cut in prices for shipment. Cutch extract was further reduced one quarter cent per pound last week.

Shoe production in February is estimated at 49,200,000 pairs, a decline of 12.5% from the February 1956 record output of 56,230,000 pairs according to National Shoe Manufacturers Association. Based on manufactures' schedules, March output will approximate 52.5 million pairs, 4.8% less than a year ago. Production in the first quarter of 1957 was estimated 153,235,000 pairs compared with 164,627,000 pairs during the same period in 1956; 150,219,000 in 1955 and 135,891,000 in 1954.

Raw wool weekly consumption during January was reported at 8,244,000 pounds (scoured basis), 5 percent above December and 12 percent below January 1956, by the Bureau of Census, while consumption of carpet wool increased 5 percent compared to December but was 8 percent smaller than January last year. Apparel class wool consumption was 2 percent above December and 8 percent below January, 1956.

Price Trends

Advanced
None.

Reduced
Cutch, ¼c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	March 23, 1956
105.33	105.33	108.23	106.99

For Current Prices See Page 9

Chemicals

Bichromates — Business was reported spotty chiefly for prompt delivery. Prices were without change and well held. Withdrawals continued to move in good volume against current contracts.

Sodium Acetate—Consumers operated in a hand to mouth manner. Prices were maintained at prevailing levels.

Sodium Hydrosulfite—Demand was reported light and confined to actual needs reflecting reduced textile output. Quotations were unchanged and steady.

Sulfonated Oils—Business was reported light. Quotations were without change.

Sizing Materials

Albumin, Egg—Recent sharp reduction in price improved buying interest and trading was quite active for prompt requirements. Flake was maintained at $1.36 to $1.38 per pound spot, as to quantity and powder, $1.40 to $1.42 per pound, same basis. Limited supply kept the technical unchanged and steady at $1.08 to $1.10 per pound, spot according to quantity.

Corn Starch—Moderate volume of business was noted for actual requirements. Prices were without change and well held. Pearl was quoted at $7.32 per 100 pounds, paper bags, carlots, New York basis and powder, $7.44, same basis. Less carlots were 15c. higher. Visible corn supply was sharply higher and increased 4,598,000 bushels to 92,773,000 bushels for the week ended March 15, compared with 53,845,000 bushels for the corresponding week last year, according to Chicago Board of Trade.

Farmers intend to plant 74,410,000 acres to corn in 1957 according to the Department of Agriculture against 78,557,000 acres last year and 10 year 1946-55 average of 83,942,000 acres.

Egg Yolk—Consumers absorbed fair sized lots for immediate requirements. Prices were steady ranging from $1.01 to $1.03 per pound, spot depending upon quantity.

Potato Starch—Demand was reported quite active for less carlots for spot delivery, while carlot business was limited. In Maine, carlots were maintained at 6¼c. per pound, f.o.b. mills, for prompt delivery. Stocks on spot ranged from 8¼c. to 9¼c. per pound, exwarehouse according to quantity. Production in Idaho was practically sold up and reports were current that carlots would be raised to 6½c. f.o.b. mills, effective April 1 less the former discount of ½c. for shipment to eastern points.

Farmers intend to plant 1,421,000 acres to potatoes in 1957, compared with 1,412,000 acres last year, it was reported by the Department of Agriculture. The 1946-55 10 year average is 1,533,000 acres.

Total storage stocks of Fall potatoes held by growers and local dealers on March 1 amounted to 59.2 million hundredweight, according to the Department of Agriculture. These holdings are 21 percent above the 48.7 million hundredweight held on March 1, 1956, and 14 percent larger than the six-year (1950-55) March 1 average stocks of 51.8 million.

Tapioca Flour—Deliveries against contracts continued to move in good volume into consuming channels, while new business was restricted to actual requirements. Interest in Siamese grades for shipment was reported limited. Offers for shipment were well held at former levels. Medium was quoted at 5.35c. per pound, carlots, exdock prompt shipment and grade A 5.8c. to 5.9c. per pound, same basis. Offers of new crop high grade Brazilian were scarce with sellers ideas around 9½c. to 10c., carlots, exdock. On spot, this grade in small lots ranged from 12½c. to 13½c. per pound, exwarehouse, as to quantity.

Tanning Materials

Chestnut Extract—Activity in this market was still limited, despite announcement of fractional price declines. Solid extract, 60 percent tannin was recently cut to 8½c. per pound, exdock, plus duty for shipment and 68 percent to 9.59c., same basis.

Cutch—Consumer interest was reported slow at the lower cost of replacements. Shipments were further reduced to 8c. per pound, exdock, plus duty for May delivery.

Myrobalans—Consuming inquiry was reported fair, but actual business was reported slow. Shipments were quotably unchanged. Genuine JI was quoted at $61 to $62 per ton, exdock, prompt shipment; Bombay at $58 to $59 per ton and crushed at $79 to $80 same basis.

Quebracho Extract—Consumers continued to confine inquiry to nearby shipment. Primary market remained steady at the recent price decline. Solid clarified was maintained at 10.7429c. per pound, and ordinary, 9.8035c. per pound, carlots, exdock, plus duty for prompt and later shipment.

Valonia—This market was dull and featureless. Trading was reported inactive for all grades. Beards were quoted at $86 per ton, carlots, exdock, prompt shipment; cups, $64, per ton and extract, 9¾c., exdock, plus duty.

Wattle—Recent sharp price declines for replacements of bark and extract has not as yet improved business according to trade sources. Fair average bark was offered $80 per ton, exdock, prompt shipment, a decline of $18 during the past month and merchantable, $75 per ton, same basis. East African extract, 60 percent was available at 8.275c. per pound, exdock, plus duty and South African, 8.4c. per pound, same basis.

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Purified, Granular

3 excellent reasons to buy Baker

❶ exceptionally pure
❷ controlled particle size
❸ fast-dissolving

SPECIFICATIONS

Assay $(NH_4)_2SO_4$	99.5	% Min.
Insoluble Matter	0.010	% Max.
Residue after Ignition	0.010	% Max.
Arsenic (as)	0.00003	% Max.
Heavy Metals (as Pb)	0.001	% Max.
Iron (Fe)	0.001	% Max.
Neutrality	Passes Test*	
pH of 5% Solution at 25°C	5.0-6.0	
Particle Size (Mesh)	At least 98% thru U.S. No. 20 Sieve	
	At least 90% thru U.S. No. 35 Sieve	
	At least 75% on U.S. No. 200 Sieve	

*A.C.S. neutrality test for reagent ammonium sulfate.

If Ammonium Sulfate is essential to your process, these three reasons can mean time and money to you.

Baker Ammonium Sulfate, Purified, Granular, is a product of synthesis.

It is produced from pure ammonia and sulfuric acid. This, plus Baker's precise process controls, yields an ammonium sulfate free of the usual impurities of by-product material. Its uniform granular particle size is fine enough to dissolve fast and provide trouble-free processing.

These valuable properties help minimize your processing and product variation, help decrease your production time, help *cut* your costs by eliminating purification steps.

USES: Baker Ammonium Sulfate, Purified, Granular, finds particular application in industries requiring a material exceptionally low in critical impurities such as arsenic, heavy metals and iron.

Pharmaceutical —antibiotic manufacture; preparation of biological serums; precipitant in purifying and separating proteins; in blood fractionation.

Food Processing—in dry yeast production and in leavening agents.

Fermentation—as an activating agent, nutrient, and for pH control.

Cosmetics—in formulations for home permanent hair waving, in shampoos.

PACKAGING: Baker Ammonium Sulfate, Purified, Granular, is packaged in fibre drums with net weights of 25, 100 and 300 pounds, and in bags of 100 pounds net weight.

The ability to produce fine and industrial chemicals *of outstanding purity for process and ingredient use* has made Baker a leading supplier for half a century.

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J. T. Baker Chemical Co.
Executive Offices & Plant, Phillipsburg, N. J.

Baker CHEMICAL

Baker Chemicals
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Drugs, Fine Chemicals

A producer announced an increase on l-tryptophane in the only price change noted in drug and fine chemicals markets last week. The advance was said to be due to the fact that research efforts have failed to unearth sufficient market outlets for d-tryptophane so that production costs have had to be carried largely by the 1 form.

Vitamin prices were firmly quoted after the recent declines in pyridoxine and niacinamide. Producers thought it unlikely that the price of niacin would be effected in the immediate future by the change in the amide two weeks ago. B-complex vitamins were in seasonally good demand and trade sources speculated about chances for achieving record sales comparable to last year. Markets have continued to expand as a result of technological development and research, it was said. However, it was pointed out, increased sales volume and more widespread commercial availability in the past have meant more competition, both domestic and foreign, coupled with price reductions and narrowing profit margins.

Major producers of salicylates continued to face heavy demands from makers of products exhibiting analgesic and antipyretic properties. With the end of the cold season in view, it appeared that consumers were building inventories against higher replacement costs to be anticipated in the coming months.

The market for tartrates continued in a routine fashion. Demands for the acid were modest in the face of the active consuming interest which has featured the citric acid market in recent months. Domestic producers of tartrates reported operations were continuing under the pressure of imports.

Price Trends

Advanced
None.

Reduced
None.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	March 23, 1956
65.27	65.27	65.29	65.84

For Current Prices see Page 9

Ascorbic Acid—Vitamin C production in November was 249,493 pounds as compared with 219,679 pounds produced in December, according to Tariff Commission reports. Trade needs were normal and buying interest in the bottled beverage industry was expected to be on the increase with the coming of warmer weather. Stocks were ample for immediate needs.

Barbiturates—No changes in price were noted in this market since last reports. Tariff Commission figures show that production of barbituric acid derivatives in December, totaled 30,308 pounds. Demands were steady and said to compare favorably with last year, although it was indicated again that the market in recent years has been depleted somewhat with the advent of tranquilizer drugs as well as other sedative products.

Carmine—One hundred pound lots of red carmine No. 40 were quoted at $16.80 per pound. This price has been maintained since the advances made late last summer. Dealers continued to report somewhat limited supplies. Demands were steady with low volume sales recorded. Recent shipments of cochineal reaching United States ports have assured dealers of adequate raw materials for present needs.

Gallic Acid—NF gallic acid in 1000 pound lots was priced at $2 per pound. Interest was routine and supplies quite plentiful according to trade sources queried. The price established in the trade last December was firmly quoted.

Glycine—Prices of long standing in the trade continued to prevail last week. Demands were routine and supplies quite in order. Material was said to be moving to consumers for established pharmaceutical end-use patterns. Major producers and dealers reported little change in the conditions of this market from last reports.

Methionine—The dl product was said to be continuing to find good use in the feed industry. Price was unchanged and supplies were ample for the immediate needs of the trade. A recent report indicates that a mixture of methionine and guanidoacetic acid is particularly effective in conserving body nitrogen under stress conditions such as a sarcoma or toxic chemotherapeutic agents. Methionine and cysteine have been used to reduce the growth of sarcoma R-1 in experimental animals maintained on sulphur deficient semisynthetic diets, according to the report.

Niacin—Demands continued to be good from the feed industry as well as from makers of food and vitamin preparations containing niacin. Supplies were ample, it was said, and trade sources did not anticipate that the change in niacinamide prices of two weeks ago would have any immediate effect in this market. Tariff Commission figures show that production of niacin and amide in November totaled 220,575 pounds as against a December production of 222,163 pounds.

Penicillin—Reports of recent date indicate that synthetic penicillin V, the more acid-stable form of the antibiotic, may be expected to be used against organisms resistant to natural penicillin, effective against a wider variety of organisms and less likely to produce allergic reactions. Attempts were made to synthesize penicillin during World War II and it has been said that research efforts on the problem since that time have totaled approximately $20 million. A yield of 10 to 12 percent of penicillin V is said to be possible using the new method of synthesis it was said.

Phenothalein — Inquiry was routine and supplies were said to be quite adequate. Price was unchanged from levels established in the latter part of 1956. Major producers anticipated no changes in the conditions in this market. Increased production and handling costs last year were said to have been responsible for the advance of some months ago.

Pyrogallol—Consumer interest was routine. Prices were unchanged from levels established in early December of last year. NF material in 100 pound drums was available from major producers priced at $3.50 per pound while technical pyrogallic acid, same quantity, was priced at $3.17.

Reserpine—Prices remained pegged at $2.40 per gram after the series of reductions which have brought the alkaloid down from a price of $8 per gram since January, 1956. More widespread use of this item in the booming tranquilizer market was said to be partially responsible for the reductions. It was estimated that sales of tranquilizer products will total approximately $150 million this year.

Salicylates—Major producers continued to operate under the pressure of heavy demands from consumers of aspirin, acetophenetidin, salicylic acid and a number of other salicylates which go into the manufacture of analgesic and antipyretic products. Aspirin production in November totaled 1,488,010 pounds as against a December figure of 1,617,872 pounds, according to reports from the Tariff Commission. With the end of the cold season in view, trade sources said consumers appeared to be building inventories against higher replacement costs in the coming months.

Sodium Benzoate—Technical and USP material remained unchanged in price last week. Major producers l.c.l. prices were quoted at 39c. for technical and 46c. per pound for USP. Demands were said to be steady for both grades with sales volume overall characterized as being at a normal level.

Sulfas—Sulfa drugs continued to move in good business volume for both human and veterinary uses. Production of bulk material in November totaled 252,613 pounds as against a December production of 263,315 pounds. A major producer recently introduced a new sulfonamide which is said to provide high blood levels with one-fourth the usual sulfa drug dosage. A single two gram dose of the new product is said to maintain blood levels for seventy-two hours as against six hours for comparable sulfas.

Thiamine—Production of B_1 derivatives

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Drugs, Fine Chemicals

in November was 26,990 pounds as against a December figure of 15,231 pounds, according to Tariff Commission reports. Material was moving to consumer channels at a normal seasonal pace and prices were unchanged from previous reports. Supplies were well in hand it was said. Imports continued to come into the country in minimal amounts, it was said.

Tannic Acid—NF fluffy in 1000 pound lots continued at $2.05 per pound while powder, same quantity, was $1.95. Trade sources reported business volume was normal for this time of year and supplies were quite adequate to fill the needs of the trade.

Tartrates—Prices were unchanged and supplies ample. Demands were steady and maintained at a moderate level by domestic makers. There were continued modest demands for tartaric acid in the face of a good market for citric acid and derivatives. Conditions have been substantially unchanged concerning tartrates for several weeks. Domestic producers continued to operate under the pressure of imports.

Tryptophane—A producer announced last week that the price of l-tryptophane would be advanced from $400 to $500 per kilo. The increase was said to be necessary since researchers have not been able to come up with a good market use for d-tryptophane. Consequently, the burden of production costs falls on the l-tryptophane. Use of the latter has been confined largely to research and there was speculation as to the possibility that it may be used in the production of polio vaccine. dl-Tryptophane was unchanged in price at $165 per kilo. Principal outlet continued to be for nutritional and medicinal therapy.

Undecylenic Acid—Trade sources reported no noticeable change in sales volume on this item for the past few weeks over a comparable period last year. Observers reported demands seasonally good for this material used as a fungicide in athlete's foot remedies. Stocks were quite in order and well able to handle the current need of the trade.

Botanicals

Dealers continued to report moderate to good trade interest from consumers for the coming new crop material on several popular domestic drug items. With the peak collection season for botanicals in the months from early March to August, it was expected that inquiry would continue to improve with dealers contracting for drugs at the normal rate. Collections this year, it was said, are expected to roughly parallel those of last year. The trend continues to be toward scanty collections of important domestic items since labor has become scarce and high wages are expected when it is available at all. It was pointed out that high employment levels in the lumber, paper making and furniture industries takes a great percentage of available labor in the important southern collection areas of this country. In the past decade, too, there has been an ever increasing number of chemical plants opening in southern states due to favorable labor and tax conditions.

Dealers in imported botanicals, especially those from the troubled areas in the Middle East predicted that materials would continue to be scarce and high priced.

Papain shipments of recent date have been detained by FDA officials it was said. Prices have shown a marked increase in recent weeks. Gum products were generally unchanged. Dealers reported very good interest in shipments of new crop material on locust bean, and Arabic as well as tragacanth and Karaya. Overall, prices on imported botanicals tended to fluctuate sharply due to the uncertain conditions under which dealers have operated during the past year. Troubled political conditions at foreign sources, adverse weather conditions and advanced ocean freight rates coupled with uncertain shipping schedules have combined to harry dealers on all sides.

Digitalis—Leaves were unchanged in price and moving to consumer channels at good seasonal rate. Supplies were ample in the face of a normal seasonal interest in the trade. Price has been reduced slightly from late last year since supplies have become a trifle easier.

Polio Vaccine

—*Continued from page 3*

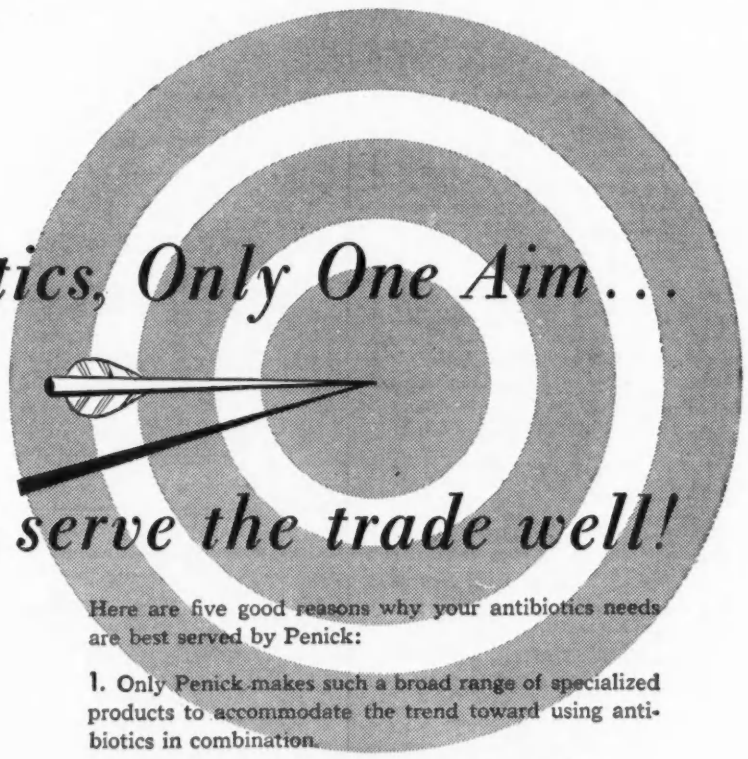
and other large industrial concerns for their employees between twenty and forty years of age, be held up for the present until the needs of the priority groups have been met.

He strongly favored such programs, but thought that in view of the tight supply situation, first choice should go to the under-twenty and expectant-mothers group.

Dr. Burney also rejected ideas that the Federal government should take a strong stand in favor of mass immunization programs.

While he approved of campaigns for mass inoculations, he said, the methods to be used of bringing the vaccine in contact with the people should be left to the states. They know best how well equipped their local health agencies are to handle the distribution of the vaccine, he stated, and would resent any edicts from Washington in this matter.

In Antibiotics, Only One Aim...



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3. Buying from a single source is more convenient, measurably lowers your handling costs.

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Data Offered

The **1957 edition of the Reilly Chemical Index** is available on request to Reilly Tar & Chemical Corporation, Merchants Bank Building, Indianapolis 4, Ind. The brochure contains data on eight new compounds developed by Reilly last year as well as a short description of all the chemicals produced by the company.

Magnus, Mabee & Reynard, Inc., 16 Desbrosses street, New York 13, N. Y., offers to send a copy of the new **MM&R spring catalog** to any manufacturer who is interested in quantity purchases of its products. The catalog contains over 1,000 listings of essential oils, balsams, oleoresins, concentrated flavors, basic perfume oils, aromatic chemicals and certified colors.

Manufacturing Chemists' Association today publishes the third edition of **"The Chemical Industry Facts Book."** The 160-page reference work contains fifteen chapters ranging from "The Industry's Role in the Economy" to such specifics as "Chemicals and Nuclear Energy." The book is profusely illustrated with charts, graphs and tables. Copies are available at $1.25 each, postage prepaid, from MCA, 1625 Eye street, N. W., Washington 6, D. C. Discounts are available on bulk quantities.

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Emery Is

—Continued from page 8

and sales management, has been appointed vice-president and general manager of Emery Industries (Canada).

A sizeable investment is planned for expansion and modernization of present facilities. Installation of new equipment will enable Emery's Canadian branch to produce a complete line of top-quality fatty acids for the Canadian market equivalent to those currently supplied in the United States it was said.

In addition to stearic, oleic, animal and vegetable fatty acids and glycerides, the new company will product lard oils, metal working compounds, textile chemicals and "Sanitone" dry cleaning compounds.

F. S. Lawrason & Co., under the direction off Walter J. Evans, president, will be retained as exclusive sales agent for all Emery products, except "Sanitone," in the Dominion. A joint program is planned which will enable Lawrason to provide complete technical sales and service assistance to Canadian consumers of Emery products.

Lawrason is planning new quarters in London for expanded manufacture of its sanitary and specialty chemicals, along with its increased sales activities.

DCAT Charges Pricing Bill

—Continued from page 4

tion and seriously interere with normal business procedures.

J. David Hayden, section chairman, said, "Many of our members are daily confronted with the business situation in which they must decide whether or not they will meet a competitor's price. If they can establish that a lower price has been offered in an actual competitive framework, they must then determine, usually in a matter of days or even hours, whether they wish to meet the lower price or risk the loss of the business.

"If while making this decision they must, at the same time, determine whether their action, in meeting the lower price, will at some later date expose them to the risk of a treble-damage action because it may be held to offend an amended Robinson-Patman act, we submit that congress will thereby be imposing an unfair and onerous burden on business."

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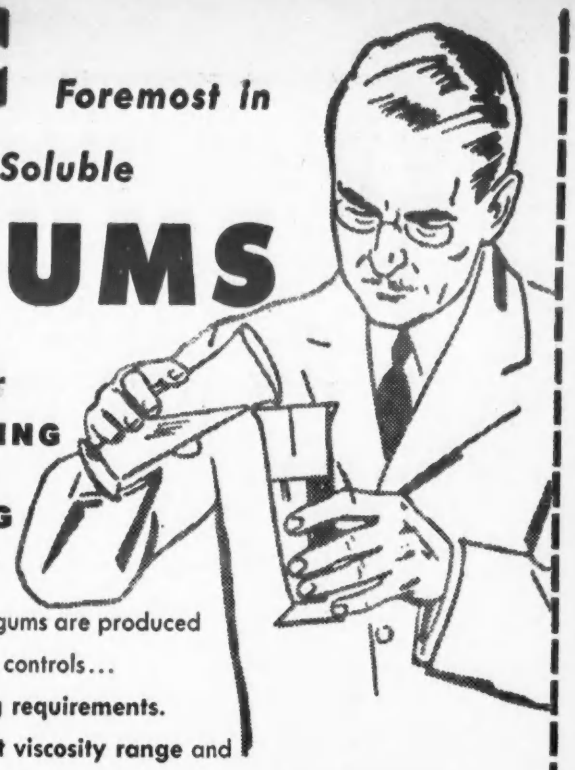

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ABIETIS OIL—8 dms, Kolon Trading Co, Gdynia
ACENAPHTHENE—12 dms, F L Kramer & Co, Rotterdam
AGAR—1 bbls, Transworld Commercial Corp, Barcelona
14 dms, T M Duche & Sons, Barcelona
9 bbls, Merchants Bank, Barcelona
ALKYLPOLYETHYLENE GLYCOL — 10 dms, Inchemtex Inc, Antwerp
ALUM—600 bgs, C M C Chemicals Inc, Liverpool
ALUMINUM SULFATE—500 bgs, C M C Chemicals Inc, Liverpool
AMMONIUM CHLORIDE—250 bgs, Rotterdam
AMYLOSE—100 bgs, Rotterdam
AMYRIS OIL—4 dms, Ungerer & Co, Port Au Prince
1 dm, Roure-Dupont Inc, Port Au Prince
9 dms, Port Au Prince
ANILINE DYES—4 dms, Heemsoth Kerner, Liverpool
6 dms, C A Haynes, Hamburg
2 dms, Hensel Bruckmann & Lorbacher, Bremen
59 cms, Hensel Bruckmann & Lorbacher, Hamburg
4 dms, A Hoffman & Co, Liverpool
2 dms, Arondy Corp, Liverpool
31 dms, Sandoz Chemical Works, Havre
20 dms, Sandoz Chemical Works, Bremerhaven
60 dms, Geigy Chemical Corp, Bremerhaven
23 dms, Geigy Chemical Corp, Havre
ANNATTO SEED—65 bgs, Irving Trust Co, Callao
ANTIMONY—8 cks, Watson Geach, Liverpool
ANTIMONY REGULUS—100 cs, C Gitlan, Antwerp
383 cs, Sibenik
ARGOLS—1,263 bgs, Tartaric Raw Materials, Merseille
ARSENIC—34 bbls, American Firstoline Corp, Gothenburg
ARSENIC, METALLIC—69 dms, Danwill Co, Gothenburg
31 dms, Belmont Smelting & Refining Works, Gothenburg
ASBESTOS FIBER—3,000 bgs, Johns Manville Corp, Beira
500 bgs, Davies Turner & Co, Durban
1,280 bgs, Johns Manville Corp, Port Elizabeth
1,000 bgs, Bankers Trust Co, Lourenco Marques
BARBASCO ROOT—31 bls, Astoria Panamericana, Callao
BEESWAX—17 bgs, Lenape Trading Co, Aux Cayes
11 bgs, Marcel Calvert, Gonaives
40 bgs, H H Pike & Co, Puerto Plata
30 bgs, Schutte & Focke, Ciudad Trujillo
50 bgs, Porcella Vicini & Co, Ciudad Trujillo
46 pkgs, Guaranty Trust Co, Alexandria
18 bgs, General Import Distributors, Havana
60 bgs, Duncan Fox & Co, Talcahuano
167 bgs, Hans Tobeason, Lisbon
45 bgs, Tampico
30 bgs, Ciudad Trujillo
110 bgs, Havana
BISMUTH—72 cs, Cerro de Pasco Corp, Callao
BRONZE POWDER—48 dms, Chase Manhattan Bank, Hamburg
BUTYROLACTONE—100 cks, American Cyanamid Co, Hamburg
CADMIUM SULFIDE—2 cs, Phillip Bros, Chemicals, London
CALCIUM CARBONATE—1,000 bgs, H J Baker & Bros, Avonmouth
CALCIUM HYPOPHOSPHITE—18 cs, Oxford Chemical Corp, London
CAMPHOR OIL—9 dms, Polarome Manufacturing Co, Keelung
6 dms, Orbis Products Corp, Keelung
10 dms, Lo Curto & Funk, Kobe
POWDER—100 cs, Melanol Corp, Keelung
CARAWAY OIL—8 dms, Rotterdam
CARAWAY SEED—200 bgs, C M C Van Sillevoldt, Rotterdam
400 bgs, Rotterdam
CARNAUBA WAX—122 bgs, Cornelius Wax Refining, Fortaleza
278 bgs, F Henjes, Fortaleza
167 bgs, National City Bank, Fortaleza
56 bgs, River Plate Corp, Fortaleza
278 bgs, M Argueso & Co, Fortaleza
CASEIN—500 bgs, Tupman Thurlow, Buenos Aires
300 bgs, Chase Manhattan Bank, Buenos Aires
358 bgs, F H Paul & Stein Bros, Bergen
120 bgs, H S C Trading Co, Buenos Aires
4,000 bgs, Pacific National Bank, Melbourne
3,500 bgs, Borden Co, Buenos Aires
600 bgs, W L Willner Co, Buenos Aires
2,000 bgs, Buenos Aires
CASSIA—74 bls, Jacoberg Overseas Inc, Rotterdam
3,295 bls, Rotterdam
CASTOR BEANS—5,000 bgs, Bahia Ceras Products, Salvador
1,694 bgs, Spencer Kellogg, Salvador
833 bgs, Baker Castor Oil Co, Salvador
CASTOR OIL—300 tons, Woodward & Dickerson, Salvador
CENTAURY MINOR—40 bls, Meer Corp, Lisbon
CHESTNUT EXTRACT—1,200 bgs, Barkey Importing Co, Genoa
CHINA CLAY—235 bgs, English China Clay Sales Corp, Avonmouth
CHLORINATED RUBBER—200 bgs, C M C Chemicals Inc, Liverpool
CINNAMON BARK OIL—4 cs, Ungerer & Co, Colombo
CINNAMON LEAF OIL—10 dms, Dodge & Olcott, Colombo
CINNAMON QUILLS—50 bls, Shippers Produce Corp, Colombo
CITRONELLA OIL—40 dms, Lo Curto & Funk, Keelung
23 dms, Volkart Bros, Colombo
CLOVE—100 bls, First National Boston, Zanzibar
80 bls, Zanzibar
COALTAR, CREOSOTE—40 dms, J M Rodgers Co, Hull
COALTAR, DYES—13 bbls, Toms River Cincinnati Chemical Corp, Havre
24 dms, Hensel Bruckmann & Lorbacher, Rotterdam
COCHINEAL—34 bgs, Irving Trust Co, Callao
11 bgs, Irving Trust Co, Cadiz
COCONUT OIL—203 tons, American Trust Co, Cebu
226 tons, Manila
COD OIL—25 dms, Bowring & Co, St, Johns
CODLIVER OIL—75 dms, Peder Devold Oil Co, Alesund
74 dms, National City Bank, Lisbon
CORIANDER SEED—100 bgs, S B Penick & Co, Casablanca
200 bgs, Wm E Martin & Sons, Casablanca
CORN STARCH—672 bgs, Rotterdam
CREAM OF TARTAR—473 bgs, Nylos Trading Co, Genoa
CRESYLIC ACID—220 dms, H A Gogarty, Liverpool
551 dms, H A Gogarty, Avonmouth
25 tons, H A Gogarty, Liverpool
CUTTLEFISH BONE—150 cs, S B Penick & Co, Takoradi
240 cs, Guaranty Trust Co, Kobe
50 cs, Colombo
183 cs, Lisbon
DEHYDROACETIC ACID—5 kgs, Rohner Gehrig, Liverpool
DEXTRIN—600 bgs, Stein Hall & Co, Rotterdam
200 bgs, Beacon Freight Co, Rotterdam
750 bgs, Guaranty Trust Co, Rotterdam
870 bgs, Stein Hall & Co, Rotterdam
50 bgs, Rotterdam
DIHYDROSTREPOMYCIN—11 cs, American Roland Corp, Antwerp
DIMETHYLACETAL—2 cs, Rohner Gehrig, Hull
EUCALYPTUS OIL—10 dms, Lo Curto & Funk, Kobe
FENUGREEK SEED—190 bgs, S B Penick & Co, Casablanca
FISHMEAL—2,000 bgs, Chimbote
FISHLIVER OIL—5 dms, Consumers Import Co, Yokohama
17 dms, Arista Oil Products Co, Yokohama
FUEL OIL—231,000 bbls, Esso Export Corp, Aruba
99,017 bbls, C H Sprague & Sons, Curacao
114,882 bbls, C H Sprague & Sons, Punta Cardon
99,114 bbls, White Fuel Co, San Lorenzo
208,441 bbls, Paragon Oil Co, Tampico
456,294 bbls, Esso Standard Oil Co, Aruba
92,185 bbls, Metropolitan Petroleum Corp, Curacao
111,374 bbls, Metropolitan Petroleum Corp, Punta Cardon
GALLIC ACID—2 kgs, Antwerp
GALLNUTS—177 bgs, Carter Moore & Co, Beirut
GELATIN—500 bgs, T M Duche & Sons, Antwerp
240 bgs, T M Duche & Sons, Havre
100 bgs, T M Duche & Sons, Rotterdam
221 bgs, Manhattan Paste & Glue Co, Hamburg
50 bgs, Royal Bank of Canada, Rotterdam
30 dms, Hensel Bruckmann & Lorbacher, Rotterdam
223 bgs, B Young & Co, London
100 bgs, G Lippelgoes, Hull
100 bgs, Arles Co, Havre
GERANIUM OIL—2 dms, A Verley & Co, Algiers
2 dms, Roure-Dupont Inc, Algiers
5 dms, J Manheimer, Algiers
8 dms, Antoine Chiris, Algiers
GINGER—254 bgs, Bank of N Y, Apapa
251 bgs, Chase Manhattan Bank, Apapa
299 bgs, Wm E Martin & Sons, Apapa
160 bgs, George Lueders & Co, Alleppey
GLUCRONOLACTONE—20 cs, Byron Chemical Co, Yokohama
GLUE—230 bgs, Jung Forwarding Co, London
141 dms, M Corbett & Co, Marseille
270 bgs, Avonmouth
GLUESTOCK—364 bgs, Karr Ellis & Co, Liverpool
GLYCERINE—50 dms, Colgate Palmolive Co, Copenhagen
82 dms, R P Casado, Havana
GRAPHITE—500 bgs, Asbury Graphite Mills, Hongkong
1,568 bgs, Asbury Graphite Mills, Bergen
GUAR GUM—100 bgs, Heemsoth Kerner, Rotterdam
100 bgs, P A Dunkel, Rotterdam
1,350 bgs, Stein Hall & Co, Calcutta
GYPSUM—200 bgs, Whittaker Clark & Daniels, Liverpool
HELLEBORE ROOT—152 bls, S B Penick & Co, Rijeka
HYDROXYCYCLOHEXYL HYDROPEROXIDE — 25 dms, Celanese Corp of America, Rotterdam
INOKAWA OIL—3 dms, Fritzsche Bros, Keelung
3 dms, Norda Essential Oil & Chemical Co, Keelung
IPECAC ROOT—41 bgs, Wessel Duval & Co, Cristobal
IRANIAN GUM—250 bgs, S B Penick & Co, Rotterdam
IRON OXIDE—280 bgs, F L Kramer & Co, London
ISOPROPYL ALCOHOL—1 dm, Olin Mathieson Chemical Co, Glasgow
LACTOSE—225 dms, Chas L Huisking & Co, Liverpool
LAUREL LEAVES—187 bls, Louis Furth, Izmir
20 bls, Max Van Pels, Lisbon
LAURIC ACID—220 bgs, Rotterdam
LEMON OIL—27 dms, National City Bank, Vera Cruz
2 dms, Polak Frutal Works, Vera Cruz
51 dms, Marine Midland Trust Co, Vera Cruz
2 dms, Felton Chemical Co, Vera Cruz
11 dms, Chemical Bank, Vera Cruz
6 dms, Fritzsche Bros, Vera Cruz
2 dms, Vera Cruz
LEMONGRASS OIL—11 dms, Hoffman-La Roche Inc, Port Au Prince
LICORICE EXERACT—66 cs, Wm E Martin & Sons, Izmir
LIGNIN PITCH POWDER—1,600 bgs, Barrentan Testing & Research Corp, Oslo
LIME OIL—2 dms, Citrus & Allied Essential Oils Co, Puerto Plata
LIVERMEAL—495 bgs, Wessel Duval & Co, Rotterdam
25 cs, Bernabo International Co, Buenos Aires
192 bgs, Mombasa
LOCUST BEAN GUM—1,500 bgs, Morningstar Nicol, Piraeus
240 bgs, J L Quesada, Barcelona
59 cks, Unigum Corp, Rotterdam
MACE—14 cs, Karl H Landes & E Balint, Grenada
MAGNESIUM OXIDE—800 bgs, Darlington Chemicals Inc, Liverpool
200 cs, Darlington Chemicals Inc, Liverpool
MAGNESIUM TRISILICATE—30 cs, Reheis Co, Liverpool
MANGANESE ORE—560 bgs, National Carbon Co, London
MENTHOL—235 cs, P A Dunkel, Santos
200 cs, Schwabach & Co, Santos
MERCURY—450 flks, J H Schroder, Leghorn
200 flks, Hanover Bank, Leghorn
200 flks, Silvey Shipping Co, Rijeka
1,291 flks, Cadiz
100 flks, Vera Cruz
METHYL METHACRYLATE—30 cbys, Heemsoth Kerner, Liverpool
MOLASSES—555 tons, W R Grace & Co, Salaverry
MONOCHLOROACETIC ACID—200 dms, International Selling Corp, Marseille
1 cs, Progressive Color & Chemical Co, Bremen
MONTAN WAX—112 bgs, Cornelius Wax Refining, Rotterdam
MYROBALANS EXTRACT—400 bgs, Barkey Importing Co, Liverpool
300 bgs, Riverplate Corp, Hull
MYRTLE LEAVES—20 bls, Meer Corp, Lisbon
MYSOLINE—11 dms, Ayers Lab, Liverpool
NAPHTHALENE—1,796 bgs, Gallard Schlesinger, Hamburg
400 bgs, Gallard Schlesinger, Antwerp
400 bgs, Standard Naphtalene Products Co, Middlesbrough
1,379 bgs, American Cyanamid Co, Middlesbrough
NAPHTHENIC ACID—1,785 bbls, Esso Standard Oil Co, Aruba
NAPHTHOL—1 dm, Hensel Bruckmann & Lorbacher, Bremen
8 dms, Hensel Bruckmann & Lorbacher, Rotterdam
NICKEL CHLORIDE—28 cks, South American Minerals & Merchandise Corp, London
NICKEL SULFATE—267 bbls, Kristiansand
NUTMEG—175 bgs, Karl H Landes & E Balint, Grenada
28 bgs, Rotterdam
OLIVE OIL—325 dms, Uddo & Taormina, Casablanca
50 dms, Atlantic Bank of N Y, Casablanca
125 dms, J Ossola Co, Casablanca
100 dms, Bank of America, Casablanca
50 dms, Old Monk Olive Oil Co, Marseille
ORANGE OIL—3 dms, Citrus & Allied Essential Oils Co, Puerto Plata
PALMKERNEL OIL, HYDROGENATED— 1 dm, Amato Agency, Hamburg
PAPAIN—20 cs, Prescott & Co, Mombasa
PAPRIKA—400 bgs, Manufacturers Trust Co, Istanbul
PELLITORY ROOT—40 bgs, W Mahneke, Casablanca
PEPPER, BLACK—80 bgs, Shippers Produce Corp, Alleppey
80 bgs, J Berlage, Alleppey
80 bgs, Internatio Rotterdam, Alleppey
160 bgs, East India Trading Co, Alleppey
160 bgs, Jacobson Vanden Berg & Co, Alleppey
160 bgs, A G Dunn, Alleppey
80 bgs, Borneo Sumatra Trading Co, Alleppey
80 bgs, Becker Mayer Seed Co, Alleppey
PEPPER, RED—125 bgs, Wm M Allison & Co, Kobe
300 bgs, Hismoco American Co, Yokohama
200 bgs, M J Golombeck, Yokohama
200 bgs, S L Jones & Co, Yokohama
200 bgs, Louis Furth, Yokohama
200 bgs, Becker Mayer Seed Co, Yokohama
200 bgs, Borneo Sumatra Trading Co, Yokohama
150 bgs, Ludwig Mueller, Mombasa
850 bgs, S L Jones & Co, Kobe
100 bgs, Wm E Martin & Sons, Kobe
100 bgs, Borneo Sumatra Trading Co, Kobe
100 bgs, M J Golombeck, Kobe
320 bgs, Lagos
PEPPERMINT LEAVES—80 dms, Meer Corp, Hamburg
56 dms, S B Penick & Co, Hamburg
PETITGRAIN OIL—11 dms, Hollander Trading Corp, Buenos Aires
25 cs, Buenos Aires
PETROLEUM, CRUDE—113,278 bbls, Hess Inc, Bajo Grande
134,444 bbls, California Oil Co, Puerto La Cruz
111,183 bbls, Cities Service Oil Co, Tampico
103,826 bbls, Esso Standard Oil Co, La Salina
270,000 bbls, Esso Standard Oil Co, Puerto La Cruz
a-PICOLINE—10 dms, Industrial Chemical & Dye Co, Liverpool
221 dms, H A Gogarty, Avonmouth
POLLACKLIVER OIL—52 dms, Arista Oil Products Co, Yokohama
100 dms, J D Smith Interocean, Yokohama
50 dms, Interocean Chemical & Minerals Corp, Yokohama
25 dms, Albumina Supply Co, Yokohama
POLYETHYLENEGLYCILIC ESTER—10 dms, Inchemtex Inc, Antwerp
POLYVINYL ACETATE EMULSION—50 bbls, Lloyd Associates, Bremen
POLYVINYL ALCOHOL—14 dms, Air Reduction Co, Kobe
POPPY SEED—200 bgs, Levy & Levis Co, Gdynia
200 bgs, Louis Furth, Gdynia
200 bgs, Hoger Corp, Gdynia
200 bgs, Joel Bieler, Gdynia
200 bgs, C M Van Sillevoldt, Gdynia
100 bgs, R T French, Rotterdam
150 bgs, I Grob, Rotterdam
100 bgs, Rotterdam
POTASSIUM FERROCYANIDE—50 bbls, Transatlantic Chemical Corp, Hamburg
POTASSIUM PERCHLORATE—25 bbls, Chilean Nitrate Sales Corp, Antofagasta
POTASSIUM PERMANGANATE—20 dms, Henley & Co, Liverpool
PYRETHRUM FLOWERS—31 bgs, Food Machinery & Chemical Corp, Puna
252 bls, Gulf Oil Corp, Mombasa
125 bls, Fairfield Chemical Division, Mombasa
QUEBRACHO EXTRACT—4,025 bgs, American Tanners Ltd, Buenos Aires
1,518 bgs, Buenos Aires
QUINIDINE SULFATE—11 dms, Lo Curto & Funk, Hamburg
RADIUM ELEMENT—3 cs, Radium Chemical Co, Antwerp
RAPESEED—100 bgs, Rotterdam
RHIZOMA IRIDIS—4 bls, S B Penick & Co, Rijeka
ROSEHIP EXTRACT—12 cs, Barth Levitt Products, Gothenburg
POWDER—13 dms, Barth Levitt Products, Gothenburg
RUTILE SAND—2,800 bgs, International Titanium Corp, Brisbane
1,985 bgs, Metal & Residues International Corp, Brisbane
2,304 bgs, Metal Traders Inc, Brisbane
RUTIN—12 bgs, Karl B Rosen, Sydney
SALICYLIC ACID—20 dms, Rotterdam
4 dms, Ungerer & Co, Cristobal
SANDALWOOD—216 bgs, George Lueders & Co, Calcutta
OIL—2 cs, Antoine Chiris, London
SAPONIN—8 cs, A K Peters Co, Liverpool
SASSAFRAS OIL—88 dms, Wm H Mueller, Rotterdam
SEEDLAC—200 bgs, Gillespie Rogers Pyatt, Calcutta
700 bgs, Wm Zinsser & Co, Calcutta
250 bgs, C H Timm, Calcutta
SENNA LEAVES—34 bls, Meer Corp, Alexandria
SERPENTINA ROOT—6 bdls, Meer Corp, Colombo
SESAME OIL—50 dms, Amato Agency, Hamburg
35 cs, Bohea Trading Co, Kobe
SESAME SEED—375 bgs, Louis Furth, Cristobal
5,944 bgs, Cutuco
SHARK OIL—20 dms, E F Drew & Co, Havana
SHELLAC—50 bgs, Wm Zinsser & Co, Calcutta
100 bgs, Haeuser Shellac Co, Calcutta
200 bgs, C H Timm, Calcutta
100 bgs, P N Rowe, Calcutta
27 dms, F H Paul & Stein Bros, Hamburg
27 bgs, F H Paul & Stein Bros, Hamburg
67 dms, F H Paul & Stein Bros, Rotterdam
SOAP BARK—110 bls, S B Penick & Co, San Antonio
SOD OIL—96 dms, E F Drew & Co, Rotterdam
SODIUM BICHROMATE—100 dms, Ferro Metal & Chemical Corp, Durban
SODIUM CHLORITE—220 dms, Independent Chemical Corp, Hamburg
SODIUM CYANIDE—250 dms, Chemical Manufacturing Co, Liverpool
250 dms, Chemical Manufacturing Co, Middlesbrough
SODIUM PERBORATE TETRAHYDRATE—500 lbs, Lo Curto & Funk, London
SODIUM PHOSPHATE—200 dms, Rotterdam
SODIUM SILICOFLUORIDE—1,200 bgs, Abbey Fluoride Sales Corp, Hamburg
400 bgs, Rotterdam
STRAMONIUM LEAVES—61 bls, S B Penick & Co, Rijeka
SULFATHIZOLE—2 dms, Standard International Corp, Hamburg
20 bbls, Conray Products Co, Rijeka
TANNING EXTRACT—16 dms, Geigy Chemical Corp, Bremerhaven
TAPIOCA FLOUR—100 bgs, Manhattan Paste & Glue Co, Liverpool
THALLIUM SULFATE—2 cs, Lo Curto & Funk, Rotterdam
10 cs, Lo Curto & Funk, London
TOLU BALSAM—10 dms, Wessel Duval & Co, La Libertad
ULTRAMARINE BLUE—400 bgs, Whittaker Clark & Daniels, Hull
UREA, SYNTHETIC—4,000 bgs, Chemical Manufacturing Co, Liverpool
4,000 bgs, Chemical Manufacturing Co, Middlesbrough
VALONIA CUPS—7,440 bgs, Barkey Importing Co, Izmir
VANILLA BEANS—25 cs, First National Boston, Havre
VETIVER OIL—1 dm, Ungerer & Co, Port Au Prince
1 dm, Roure-Dupont Inc, Port Au Prince
3 dms, Fritzsche Bros, Port Au Prince
WATTLE EXTRACT—533 bgs, Tanimex Corp, Durban
536 bgs, River Plate Corp, Mombasa
WHITING—896 bgs, Smith Chemical & Color Co, Hull
1,400 bgs, Antwerp
WITHERITE—112 tons, E I Dupont De Nemours & Co, Middlesbrough
WOOL GREASE—52 dms, National City Bank, Port Adelaide
52 dms, Antwerp
ZINC SULFIDE—1,200 bgs, Rotterdam
ZIRCON SAND—3,600 bgs, International Titanium Corp, Brisbane
2,000 bgs, Metal Traders Inc, Brisbane
4,000 bgs, Lo Curto & Funk, Brisbane

Los Angeles

CASSIA—260 pkgs, Koppel Bros, Antwerp
CODLIVER OIL—10 dms, Nutro Dog Food Co, Antwerp
COPRA—1,820 tons, Procter & Gamble Co, Cebu
1,120 tons, American Trust Co, Cebu
560 tons, Paul N Smith Corp, Cebu
COPRA CAKE—2,240 bgs, Balfour Guthrie & Co, Manila
6,720 bgs, Procter & Gamble Co, Manila
2,240 bgs, Cargill Inc, Manila
COPRA OIL PELLETS—7,000 bgs, Manila
CORN STARCH—1,120 bgs, East Asiatic Co, Rotterdam
FISHLIVER OIL—30 dms, Interocean Chemical & Minerals Corp, Yokohama
PEATMOSS—150 bls, John Schumacher Co, Hamburg
1,000 bls, H V Nootbaar & Co, Bremen
PETROLEUM, CRUDE—16,462 tons, Richfield Oil Corp, Punta Cardon
POPPY SEED—100 bgs, B C Ireland Inc, Antwerp
SESAME SEED—100 bgs, R J Spitz Inc, San Juan del Sur
WHITING—3,974 bgs, Antwerp

Philadelphia

ARSENIC—38 bbls, American Firstoline Corp, Gothenburg
ASBESTOS FIBER—700 bgs, Davies Turner & Co, Durban
3,328 bgs, Chas Kurz Co, Lourenco Marques
3,200 bgs, Lourenco Marques
BONE—15,525 bgs, Baugh & Son, Rosario
2,500 bgs, C G Trading Co, Calcutta
BONEMEAL—220 bgs, Buenos Aires
CAMPHOR POWDER—20 cs, Vicks Chemical Co, Bremen
CASTOR OIL—458 tons, Rohm & Haas, Bombay
CHESTNUT EXTRACT—1,800 bgs, Bordeaux
CHINA CLAY—4,534 tons, Fowey
COCONUT OIL—630 tons, American Trust Co, Manila
EARTH COLORS—450 bgs, Reichard Coulston, Bremen
FISHLIVER OIL—20 dms, Arista Oil Products Co, Yokohama
30 dms, Hanover Bank, Yokohama
290 dms, Yokohama
GYPSUM, CRUDE—11,718 tons, U S Gypsum Co, Hantsport
LIVERMEAL—560 bgs, Hollinshead Co, Wellington
LOCUST BEAN GUM—200 bgs, T M Duche & Sons, Genoa
NAPHTHALENE—1,500 bgs, Gallard Schlesinger, Antwerp
600 bgs, Grace National Bank, Antwerp
NIGER SEED—118 bgs, R T French, Massawa
PEATMOSS—500 bls, Fertilizer Products Co, Bremen

PETROLEUM, CRUDE—102,259 bbls, Atlantic Refining Co, Caripito
129,280 bbls, Atlantic Refining Co, Paratacual
115,139 bbls, Atlantic Refining Co, La Salina
266,493 bbls, Socony Mobil Oil Co, Covenas
160,000 bbls, Socony Mobil Oil Co, Puerto La Cruz
110,009 bbls, Socony Mobil Oil Co, Amuay Bay
340,186 bbls, Gulf Oil Corp, Puerto La Cruz
130,326 bbls, The Texas Co, Punta Cardon
283,613 bbls, The Texas Co, Puerto La Cruz
110,909 bbls, The Texas Co, Las Pedras
PHOSPHATE ROCK—2,750 tons, H J Baker & Bro, Curacao
QUEBRACHO EXTRACT—3,524 bgs, Buenos Aires
RUTILE SAND—4,679 bgs, Union Carbide & Carbon Corp, Brisbane
500 bgs, Chas Kurz Co, Brisbane
6,000 bgs, Sydney
SERPENTINA POWDER—9 bgs, Frank Samuels & Co, Hamburg
SHELLAC—50 bgs, Gillespie Rogers Pyatt, Calcutta
TALC—600 bgs, L A Salomon & Bro, Bordeaux
TRICHLOROETHYLENE—50 dms, Chemical Manufacturing Co, Manchester
TUNG OIL—217 tons, Buenos Aires
UREA—1,560 bgs, Nylos Trading Co, Genoa
WATTLE EXTRACT—1,341 bgs, River Plate Co, Durban
WHITING—600 bgs, Antwerp
ZIRCON SAND—9,500 bgs, Brisbane

San Francisco

ANTIMONY REGULUS—45 cs, C Gitlan, Antwerp
BONEMEAL—200 tons, Consolidated Chemical Industries, Buenos Aires
CALCIUM NITRATE—11,405 bgs, Amsterdam
CARAWAY SEED—100 bgs, Durkee Famous Foods, Rotterdam
CASEIN—1,600 bgs, J R Spelacy, Melbourne
250 bgs, Buenos Aires
CELLULOSE EXTRACT—350 bgs, Stockholm
COPRA—500 tons, Procter & Gamble Co, Tacloban
1,000 tons, American Trust Co, Cebu
500 tons, Cargill Inc, Ozamis
500 tons, Cargill Inc, Legaspi
600 tons, Cargill Inc, Cebu
801 tons, Procter & Gamble Co, Cebu
CAKE—6,720 bgs, Procter & Gamble Co, Manila
3,000 bgs, Pacific Vegetable Oil Corp, Manila
89 tons, Pacific Vegetable Oil Corp, Cebu
CUPROUS OXIDE—224 dms, Glasgow
CURARE—1 cs, Taylor & Dean, Callao
DEXTRIN—40 bgs, Stein Hall & Co, Antwerp
FISHMEAL—5,576 bgs, East Asiatic Co, Chimbote
8,776 bgs, Albumina Supply Co, Chimbote
1,022 bgs, Wessel Duval & Co, Matarani
1,064 bgs, Wessel Duval & Co, Callao
FORMIC ACID—8 dms, I M Sobin Co, Bremen
GYPSUM—11,411 tons, Kaiser Gypsum Co, San Marcos
MONOSODIUM GLUTAMATE—135 cs, Ajinomoto Co of N Y, Yokohama
PAPRIKA—50 bgs, West Coast Spice Co, Marseille
1,650 bgs, Marseille
PEATMOSS—250 bls, Atkins Kroll & Co, Hamburg
PETROLEUM, CRUDE—134,064 bbls, Standard Oil Co, Vancouver
43,759 tons, Tidewater Oil Co, Mina Saud
167,131 bbls, Tidewater Oil Co, Sungai Pakning
PEPPER, RED—20 bgs, S L Jones & Co, Kobe
POLLACKLIVER OIL—50 dms, Wheeler & Miller, Yokohama
POTASSIUM NITRATE—120 bgs, Mattoon & Co, Bremen
400 bls, I M Sobin Co, Bremen
POTASSIUM PERSULFATE—45 dms, Mattoon & Co, Hamburg
QUEBRACHO EXTRACT—105 bgs, River Plate Corp, Buenos Aires
SODIUM CHLORITE—20 dms, Mattoon & Co, Hamburg
SODIUM FLUORIDE—218 bgs, Naftone Inc, Amsterdam
ZINC CHLORIDE—50 dms, L H Butcher Co, Antwerp

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Blue toner, 100 lbs., permanent, inv. 24525, Mar. 29, Govern. Printing Office, Purchasing Agent, Washington, D.C.

Butyl oleate, 380 lbs., inv. 24527, Mar. 29, Govern. Printing Office, Purchasing Agent, Washington, D.C.

Caustic soda, 160,000 lbs., tech., 9915% minimum assay as chlorine, inv. F570, Mar. 28, Corps of Engineers, Chicago Procurement Office, 216 West Jackson Blvd., Chicago 6, Ill.

Chrome yellow, 500 lbs., dry color, inv. 24499, Mar. 29, Govern. Printing Office, Purchasing Agent, Washington, D.C.

Copper sulfate, 30,000 lbs., inv. 116-36810, Mar. 27, Interior Dept., Bureau of Reclamation, Procurement Section, Code 311, P.O.B. 368, Ephrata, Wash.

Cottonseed oil, 850 lbs., inv. 24529, Mar. 29, Govern. Printing Office, Purchasing Agent, Washington, D.C.

Diethylbenzene, 2,800 lbs., inv. 24496, Mar. 29, Govern. Printing Office, Purchasing Agent, Washington, D. C.

Herbicide, 7,200 gals., inv. 116-36810, Mar. 27, Interior Dept., Bureau of Reclamation, Procurement Section, Code 311, P.O.B. 368, Ephrata, Wash.

Kaolin, 1,656 bots., inv. 107, small business only, Mar. 27, Military Med. Supply Agency, 84 Sands St., Bklyn. 1, N. Y.

Malathion, 4,000 gals. in 55-gal. dms., 57% deodorized, emulsifiable liquid concentrate, inv. 886, Apr. 5, Naval Purchasing Office, Naval Supply Activities, N. Y., 3rd Ave. & 29th St., Bklyn. 32, N. Y.

Methyl salicylate, 13,968 bots., inv. 107, Mar. 27, small business only, Military Med. Supply Agency, 84 Sands St., Bklyn. 1, N. Y.

Paint, 894 1-gal. cans lustreless, quick drying enamel, inv. 43, Mar. 28, Contracting Officer, Erie Ordnance Depot, Port Clinton, Ohio; 7,600 1-gal. cans enamel, inv. 133, Mar. 29, Purchasing Office, Marine Corps Supply Center, Navy Dept., Barstow, Calif.; paint, varnish, lacquer, primer and aluminum paste pigment, through period ending Sept. 30, 1957, inv. SFR-8206, Mar. 27, Gen. Services Adm., Business Service Center, Region 9, 49 Fourth St., San Francisco 3, Calif.; 11,996 gals. deck paint, small business only, inv. 1753, Mar. 29, 108,000 lbs. cuprous oxide pigment, inv. 1788, Mar. 26, Gen. Stores Supply, Navy Dept., 700 Robbins Ave., Phila. 11, Pa.

Phenylephrine hydrochloride, 17,040 bots. solution inv. 107, Mar. 27, small business only, Military Med. Supply Agency, 84 Sands St., Bklyn. 1, N. Y.

Potassium ferricyanide, 180 lbs., inv. 24629, Mar. 29, Govern. Printing Office, Purchasing Agent, Washington, D. C.

Red toner, 300 lbs., medium lithol, inv. 24485, Mar. 29, Govern. Printing Office, Purchasing Agent, Washington, D. C.

Sodium thiosulfate, 3,456 bots., inv. 107, small business only, Mar. 27, Military Med. Supply Agency, 84 Sands St., Bklyn. 1, N. Y.

Sulfamerazine, 100 lbs., inv. FW5-2251, Mar. 28, Interior Dept., Fish & Wildlife Service, 59 Temple Place, Boston 11, Mass.

TGA Meeting

—Continued from page 7

Macy & Co., "Changing Personality of the Department Store."

"Building a Product Personality Through Promotion," will be the topic for the third panel. The chairman will be Donald Bryant, of Warner-Lambert Pharmaceutical Company.

The panel members and their topics will be: Donald Frost, Bristol-Myers Company, and Norman Mack, of Peck Advertising, "Personality in Advertising," and Janet Myers, Bourjois, Inc., "A Personality for Tomorrow."

Scientific Section Papers

On the final day there will be a meeting of the scientific section at which the following papers will be presented:

"Interference of Non-Ionic Emulsifiers with Preservatives V Chromatographic and Chemical Investigation," by Constance Hall and Maison G. deNavarre, Cosmetic Laboratories, Inc., division of Beauty Counselors, Inc.

"The Measurement of Consumer Reaction to Fragrances," by Noel Schwartz and Dean Foster, U. S. Testing Laboratory.

"The Antibacterial Activity of the Aluminum Salts," by Dr. Irvin H. Blank and Ruth K. Dawes, department of dermatology, Massachusetts General Hospital, Harvard Medical School, and Marjorie Moreland, Summit Diagnostic Laboratories, Summit, N. J., "Ethanolamines in Topical Preparations," by John H. Draize, Francis X. Wazeter and Elsie A. Kelley, division of pharmocology, Food and Drug Administration. "Pitfalls in Evaluating the Safety of Cosmetics," by Dr. Bernard E. Conley, secretary, committee on toxicology, American Medical Association. "The Analytical Chemistry of Silicones in Cosmetics," by A. Pazefsky and M. E. Grenoble, chemical and metallurgical division, silicone products department, General Electric Company. "Practical Measurements of Epidermal Emolliency and Emollient Penetration," by Dr. Herbert J. Spoor.

MEDICINAL CHEMICALS

Aminophylline, U.S.P.
•
Benzil
•
Benzilic Acid
•
Benzoin
•
Betaine Hydrochloride
•
Calcium Glutamate
•
Copper-Dichlor-Quinolinol
•
Dilodohydroxyquin, U.S.P.
•
Diphenylacetic Acid
•
Glutamic Acid and HCl
•
Hydroxy Dimethyl Pyrimidine
•
Iodochlorohydroxyquin, U.S.P.
•
Paba, N.F.
•
Paba Potassium
•
Paba Sodium
•
Phthalylsulfacetamide
•
Piperazine Salts
(Adipate, Citrate, Dihydrochloride, Phosphate and Tartrate)
•
Procaine Hydrochloride, U.S.P.
•
Quinolinol (Oxyquinoline) Salts and Derivatives
•
Rutin, N.F.
•
Sodium Propionate, N.F.
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Petroleum Derivatives

A major refiner has announced a price reduction in toluene and xylene of 1½c. per gallon, thereby eliminating the price spread that has existed in the industry for several weeks. This move was seen by observers as exerting a stabilizing influence on benzene prices, which had been showing a firm undertone because of the spread in other aromatics. The aliphatic solvents were unaffected and continued to hold steady at the advanced levels set early in the year.

In line with other sections of the economy, the sales outlook in aromatics is fair, producers report. A continued high level of heavy construction and good prospects in the automobile industry are expected to hold in check the declines in weaker sections of the economy.

Supplies of all aromatics are now amply available for spot requirements as well as contract delivery. Xylene, which was tight a while back, is reported in good balance. Benzene supplies are not regarded as excessive, but toluol is still in oversupply despite the cutback in steel production.

The American Petroleum Institute last week reported production of all liquefied petroleum gases during February 15 to February 28 at 256,418,000 gallons, as compared with 280,414,000 gallons in the previous two-week period. February 28 inventories showed a substantial increase, the A.P.I. noted, with supplies moving up to 425,103,000 gallons from 406,498.000 gallons on February 15.

Price Trends

Advanced
None.

Reduced
None.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	March 23, 1956
107.65	107.65	107.65	104.37

For Current Prices See Page 9

Solvents and Diluents

Benzene—Consumption of this solvent has eased off to a moderate pace. Informed observers here attribute the heavy buying of November and December to the Suez Canal emergency which by firming the price of crude oil led consumers to expect an advance in aromatics. When such an advance no longer seemed imminent, these observers say, buying returned to normal.

In line with other aspects of the economy, the benzene outlook is fair, producers report. A continued high level of heavy construction and good prospects in the automobile industry are expected to hold in check the declines in weak sections of the economy.

Now that the price spread in related aromatics has been eliminated, the outlook in benzene prices is steady, producers report. Previously, with the mixed trend evident in toluene and xylene, benzene prices were considered firm.

Toluene—A leading refiner has announced a price reduction in toluene of 1½c. per gallon, thereby eliminating the price spread that had existed for several weeks at major shipping points.

Supply in this market is expected to lighten in the wake of curtailed production of steel. At present cokeoven inventories are still heavy and a substantial percentage of petroleum toluene is being left in the gas stream for enrichment.

Xylene—Price of this solvent has been reduced by a refiner to its previous level. The reduction of 1½c. per gallon offsets and cancels the advance announced several weeks ago.

Lighter Fractions

Butane—In its report for the two-week period ended February 28 the American Petroleum Institute last week listed butane output as 60,252,000 gallons. This compares with the total of 68,016,000 gallons reported for the previous two-week period. Inventories at plants, terminals and underground on February 28 stood at 166,682,000 gallons the A.P.I. noted, as compared with the 157,020,000 gallons stored on February 15. These figures were compiled on a Bureau of Mines basis.

Isobutane — Output of this material during the period February 16 to February 28 was reported at 14,831,000 gallons by the American Petroleum Institute. During the previous two-week period production had totaled 17,481,000 gallons. Inventories on February 28 aggregated 10,001,000 gallons as compared with 9,106,000 gallons on February 15.

Propane—Production during the two-week period ended February 28 amounted to 126,544,000 gallons, as reported by the A.P.I. During the previous two weeks, production had totaled 131,890,000 gallons. Inventories on February 28 showed a slight increase, totaling 221,581,000 gallons, as against 220,844.000 gallons on February 15.

Output of all liquefied petroleum gases (including butane, propane, isobutane and mixtures) from February 15 to February 28 reached 256,418,000 gallons, as compared with 280,414,000 gallons in the previous period. February 28 inventories showed a substantial increase, with supplies moving up to 425,103,000 gallons from 406,498.000 gallons on February 15.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended March 2 totaled 253,656,000 barrels, according to data reported to the Bureau of Mines. Compared with the total of 251,684,000 barrels of the preceding week, this represents an increase of 1,972,000 barrels, comprising an increase of 2,723,000 barrels in stocks of domestic crude and a decrease of 751,000 barrels in stocks of foreign crude.

Waxes

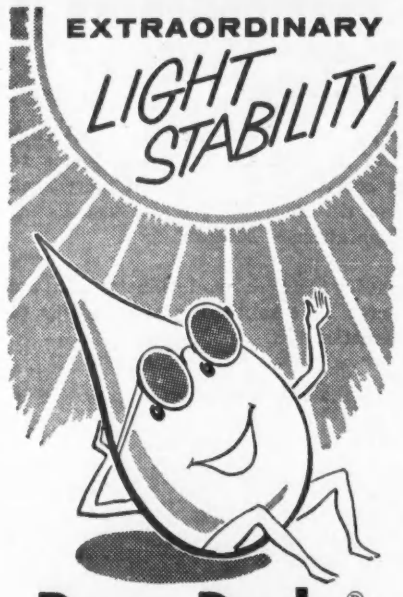
Output of petroleum waxes totaled 4,890,000 barrels in the first 11 months of 1956 as compared with 4,838,000 barrels in the comparable period of the previous year, according to the Bureau of Mines. This represents an increase of 52,000 barrels, or approximately one percent. In the same period, domestic demand for petroleum waxes increased to 4,011,000 gallons from 3,719,000 gallons in the previous year, while exports were declining to 819,000 gallons from 1,145,000 gallons previously. At the end of November stocks were reported at 611,000 barrels, as against 536,000 gallons on November 30, 1955.

Miscellaneous

Crude Oil—Current reports of the industry for the week ended March 1, 1957, indicate a decrease in crude-oil production and an increase in crude runs. According to the American Petroleum Institute, the daily average output of crude (including lease condensate) was 7,519,000 barrels, a decrease of 48,000 barrels from the preceding week. Daily average crude runs to stills of 8,076,000 barrels were 281,000 barrels above the preceding week, and 17,000 barrels below the week ended March 3, 1956. Runs of foreign crude amounted to 795,000 barrels daily, compared with 789,000 barrels in the preceding week. For the four-week period ending March 1, 1957, crude oil production averaged 7,516,000 barrels daily and crude runs to stills averaged 7,992,000 barrels daily with runs of foreign crude averaging 830,000 barrels daily.

Crude oil production in Saudi Arabia during February was reported at 20,296,133 barrels, or an average of 724,862 barrels per calendar day. This compares with 29,399,186 barrels, averaging 1,013,765 barrels per calendar day during the corresponding month of last year.

Output processed at the Ran Tanura refinery during February amounted to 6,657,277 barrels, or an average of 237,760 barrels per day, as compared with 5,875,533 barrels, averaging 202,605 barrels per day during February of last year.



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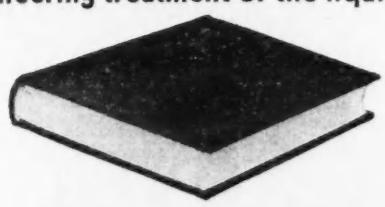

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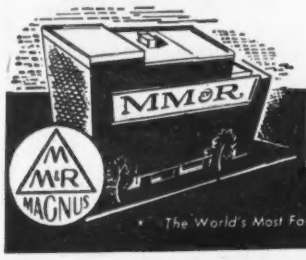

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Essential Oils, Aromatics

The market for the most part quieted down last week following the flurry of activity the week previous. Cananga, citronella and sandalwood were the only moving factors in the market. All three declined in spot listing. Lemongrass also looked weak and although it failed to move on spot last week, source and nearby positions slipped, it was reported. The citronella decline, a reflection of a weak position of long standing, was 5 cents per pound to a $1.20 spot position. The actual price movement, one source, was resultant of the defining of the position following a period of irregularity following the Suez crisis. The new price for cananga oil, $7.75 per pound for native and $9.75 per pound for rectified, came as the result of a downward movement in shipping prices from the East Indies. Sandalwood oil, another material that has been showing a particularly relaxed position on spot for some time, slipped 50 cents per pound to a $16 spot quote.

The market on the whole was beginning to show some activity out of the seasonal sales period. Inquiries, dealers suggested, were growing in volume throughout and though the market is still, in many areas, on the soft side, the feeling is that the seasonal demand is already beginning to gather impetus. Once the movement is started with any stability, it was said, the natural movement and flow will follow.

Aromatic chemicals, following on the heels of the heavy price shifts of two weeks ago (two price advances and three declines), are in the process of moving along the redefined lines layed out by the new price schedule. Here also, as in essential oils, the seasonal demand is beginning to reach cumulative proportions. Also, in the chemicals market, replacement demands for some oils which have been tied up since the European and Middle East crises, has been and is being filled by a number of aromatics.

Dealers in seeds and spices last week, where the market has reportedly slipped somewhat from an earlier slightly strengthening position, noted that caraway is steady at the decline. Poppyseed is relatively tight on spot and abroad and, it was noted, is sensitive to any demand of importance. There could be difficulty prior to new crop. Sesame is strong and in tight supply. Coriander seed is cheap and stocks are not plentiful as we are approaching the season of heaviest consumption. Quality fennel seed is in tight supply and recleaning expenses continue heavy. Cumin is steady here on spot and also abroad and supplies are claimed to be not heavy. Basil and orengo are the two difficult items in the herb list.

Price Trends

Advanced

None.

Reduced

Cananga oil, native, 10c. per lb.
Rectified, 25c. per lb.
Citronella oil, 5c. per lb.
Sandalwood oil, 50c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	March 23, 1956
145.30	145.37	138.25	135.36

For Current Prices see Page 9

Essential Oils

Bois de Rose—No further reports have been heard on this material and the spot condition remains one of even ease, it was said. Some areas, such as the London European market, have reported a growth of interest and development of inquiries but this is not considered a general picture in any respect. The spectre of heavy production and oversupply is one that the bois de rose market has not been able to shake for some time. Despite efforts at source to curb the situation that prevailed previously and despite the fact that to some degree they were successful, the market continues to drag along without any great show of strength.

Cananga—Spot prices for canaga oil are 10c. to 25c. lower per pound as the result of a downward movement in shipping prices from the East Indies. Native oil is currently offered at $7.75 per pound and rectified oil at $9.75.

Citronella—Further decline was noted in this material last week as the spot quote declined 5c. to $1.20 per pound listing. One sources noted that for a while it was difficult to obtain a clear picture of the situation in Formosan (Java-type) material because of an irregular trend but the downward movement has been steady over the past weeks. It was noted in some areas that the new listing is already being shaded. It was noted that spot prices on citronella have been rather slow in following the downward trend in shipping prices since dealers and importers have been extremely cautious in their operations for some time in anticipation of a break in the market.

With stocks in Formosa being normal for this season it is unlikely that a temporary lull in buying would bring a marked weakening of the citronella price during the remaining months until oil from the 1957 crop becomes available. In fact, with apparently only 1,000 drums left on the island, even a sporadic flareup of demand could strengthen the price. The long-range trend of the market, however, will be determined by the size of the 1957 crop. No figure on contemplated production are available yet but barring atmospheric upsets a crop as heavy as in 1956 is expected. If the demand in 1956 reflected actual use, citronella producers will have no difficulty in selling another large crop. But if the demand as evidenced in 1956 was merely the result of scare buying, the oil could in the later part of 1957 finally reach the low price level which was anticipated for Fall 1956.

Cause for the resistance abroad is said to be:

a) failure of selling pressure to materialize in Singapore where a holder of large chunk of pepper seems to have decided to stay with his stocks, and

b) the loading of a Russian steamer at the Malabar coast. The weakest element continued to be the spot and afloat position at this end which suffered from neglect by consumers. There are signs, however, that arrivals are passing into consumers hands at a satisfactory pace and since no unusually heavy shipments are due in the next few weeks, the market may have a chance to consolidate its limited gains.

Lemongrass—Though no further decline was reported on spot for this material last week, dealers here agree that the soft tone continues and may even be compounded further. The situation that has persisted for the past months may worsen on the heels of reports of another major crop this season. The soft nature of the lemongrass market has been based throughout on the heavy supply of material available. Even during the Suez crisis, when some materials became difficult to obtain or even unavailable, there was a plentitude of lemongrass to be had. Now that the new crop may offer further supply atop the material already available, there is little hope of any succor in the immediate future. As previously noted, producers at source are interested in either curbing or controlling the production picture but no immediate effects of their efforts upon the market are expected.

Prices for newcrop lemongrass oil for May/June shipment, according to reports, have dropped several cents per pound within a period of a few days and prices on nearby positions have dipped about 15c. per pound over the past ten days.

Peppermint—Some fresh lots of peppermint leaves, one source noted on spot, have arrived here from Germany. Spot prices on the imported material range from 85c. to 90c. per pound.

Sandalwood—This oil, which has been showing a softening tone for some slipped 50c. per pound in listing to a $16 spot quote. The position continued soft despite the move, one source reported, and further declines are considered possible.

Vetiver—This oil, according to recent dealers reports on spot, is stronger than it was previously and shows signs of further developments along present lines. Demand for the oil, one source said, has been running close to supply with offerings limited.

Aromatic Chemicals

The market was busy reforming itself along the lines defined by the various

Essential Oils

price changes made during the past two or three weeks. Shifts for the most part, producers here noted, were keyed to germane movements in the essential oil areas. This was true of vanillin and ethyl vanillin on the one hand—two materials that climbed in the wake of upward moving vanilla bean prices—and the three declining materials citronellol, geraniol and geranyl acetate, all of which dropped following earlier easing movements downward in their source markets. Dealers noted that the current listings are more reasonable in the light of present market positions. Further shifts would be based upon the response of the market to the present listings.

Methyl Chavicol — Substantial reductions in the price schedule of this material was announced last week by one major producer. The new listings, reductions in price ranging from $1.50 to $2 per pound, are resultant, it was said, of improved methods of manufacturing. The material is an important constituent of several of the natural essential oils and is used principally for compounding odors and flavors. It is also sometimes known as estragole.

Seeds and Spices

One dealer noted in his weekly report that: the boomlet dissipated itself with prices of by ¼c. to ½c. mainly in the nearby positions. The surprising thing about this lackluster, he went on, is the fact that the market had just begun to reason itself into accepting the preceding improvement as proof that our spot position had become less heavy and that the holding power abroad had been sufficient to weather the period of maximum pressure from the Indian crop.

The only conclusion to be drawn from the price movements of the last two weeks, the dealer suggests, is that the market is not yet ready to break through the narrow upper or lower limits within which it has been of late confined. Consequently it fails to inspire taking sides, either by dealers here or shippers abroad. The facts, however, that little has been bought for March shipment and that consumers have remained pretty much on the sidelines for the last three weeks, may keep spot and afloat from softening further. At weeks end, it was reported, it looks in fact as if the present decline has run its course.

Nutmeg—This material sank heavily in listing over the past week, dealers on spot reported last week. The current listings of $14 per pound for both East and West Indian material is $1 less than the previous East Indian price and 50c. less than the earlier West Indian quote. Dealers attributed the present lower positions to sliding prices in the source material market. Nutmeg in the spice market has been easing for some time as the result, a number of dealers suggested, of overly zealous pricing during an earlier period of the year.

Vanilla Beans—Reports here noted last week that fairly good sized quantities of vanilla beans are arriving on spot from Madagascar. They are new crop goods which had been purchased some months ago, it was noted, before the market turned higher. Approximately 50 tons are said due to arrive over the week-end and another shipment of about 1,400 cases is due next month. Total receipts over the period—February to April—will total about 3,000 cases with a value of approximately $1,800,000.

Synthetic Vanillin Barred As Natural Wine Ingredient

Synthetic vanillin has been barred as an ingredient of special natural wine by the alcohol and tobacco tax unit of the Internal Revenue Service in ruling 57-99 announced last week.

The agency said that under the provisions of section 5386 of the internal revenue code of 1954 and section 240.440 of the wine regulations, special natural wines may be made, pursuant to an approved formula, from a base of natural wine exclusively, with the addition before, during, or after fermentation, of natural herbs, spices, fruit juices, aromatics, essences and other natural flavorings in such quantities or proportions as to enable such products to be distinguished from any natural wine not so treated.

Only such vanillin, as is a natural product and is identified as such by the winemaker, is accepted for use as an ingredient in the production of a special natural wine, the ruling stated. Vanillin which is synthetic may not be so used.

Perfume Conference

—Continued from page 7

ing odors), activated carbon sorption and the diffusion of pleasant odors. He discussed these methods from the viewpoints of cost, speed, objective and consumer acceptance.

Dr. Ernst T. Theimer, of van Ameringen-Haebler, Inc., pointed out that perfume materials are organic compounds, and methods for their analysis must be based on properties of organic materials. Chemical reactions of functional groups are gradually being supplemented and replaced by physical measurements which accomplish the task of determining these groups more rapidly with greater accuracy, and on smaller samples, he said.

H. Gregory Thomas, president of Chanel, Inc., explained that although it is possible to detect in the past a trend away from straight floral fragrances, no trend toward any type of fragrance can be discerned. As new materials become available they are used to create new effects, but the great perfume is still a work of art, Mr. Thomas said.

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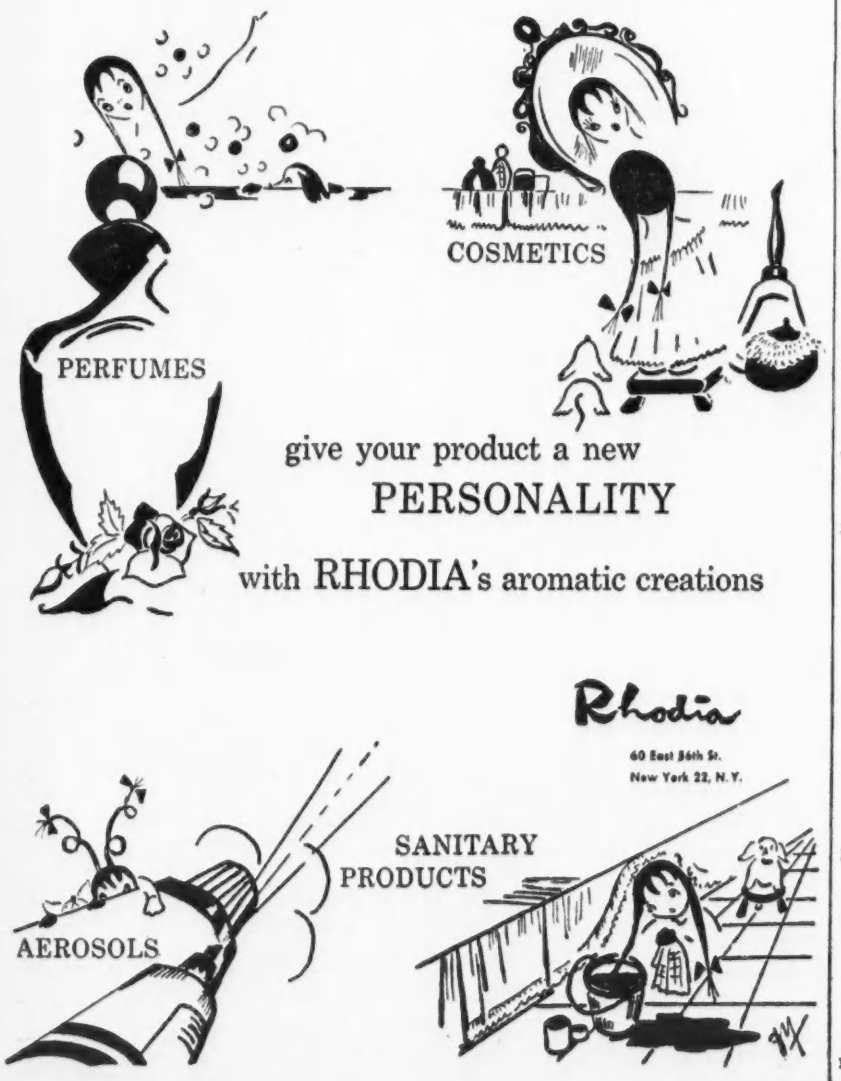

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Current Market Quotations

—*Continued from page 32*

2-Vinylpyridine, 10 dms. to tanks, works lb 1.38 - —
1 to 9 dms., works lb 1.50 - —
tanks, works lb 1.33 - —
Vinyltoluene, dms., c.l., frt. alld lb .18½ - —
l.c.l., frt. alld. lb .19½ - —
tanks frt alld lb 16 - —
Virginia type red, bbls., works lb. 1.40 - —
Viosterol in oat vegetable oil, 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units. .02½- —
Vitamin A acetate, syn., crystalline, beads 500,000 A units per gram gram .07¼ - —
dry 500,000 units per gram, kilo lots kilo.67.50 - —
325,000 units per gram, same basis kilo.43 88 - —
250,000 units per gram, same basis kilo.33 75 - —
Dry vitamin A acetate in less than kilo lots, $2.50 per kilo higher in all potencies
liq. in oil, 1,000,000 A units per gram 1,000,000 units. .10 - —
palmitate, liq., 1,000,000-1,800,000 A units per gram, 1,000,000 units. .10 - —
in oil 1,000,000 A units per gram 1,000,000 units .10 - —
B_1 (see Thiamine hydrochloride).
B_2 (see Riboflavin)
and Yeast)
B_{12}, crystalline, 1-gram or 5-gram vials gram.245.00 - —
oral grade solids, in containers of 1 and 5 grams of B_{12} activity gram.185.00 - —
C (see Acid ascorbic)
D (see Oils codliver and fish-liver Calciferol and Viosterol)
D_2 dry 850,000 units per gram kilo lots kilo.42.50 - —
less than kilo lots kilo.45 00 - —
E (see a-Tocopherol and Oil, wheat germ)
G (see Riboflavin)
H (see Biotin)
K Active (see Menadione)
K_1 25 gram bots gram 4.50 —
Violet methyl toner (see Blue methylviolet toner)
V.M.&P. naphtha (see Petroleum naphtha)

W

Wahoo root bark, bls. lb 2.25 - —
dlvd lb 1.95 - —
25-49-lb lots N Y or Chicago lb 2.05 - —
5-24-lb lots, ens. N. Y. or Chicago lb 2.15 - —
Watchung-type reds, bbls lb. 1.95 - —
Wattle bark, fair average, African, bls., ex dock ton.80.00 - —
merchantable, bls., ex dock ton.75.00 - —
extract, liq., 35% tannin, bbls lb. .08¼- .08½
solid, E. Africa, 60% tannin, bgs., ex dock, duty extra lb. .08275- —
S. Africa, 60% tannin, bgs., ex dock, duty extra lb. .0840- —
Warfarin 0.5% dms. 50-lb lots. dlvd lb. 1.95 - —
25-49 lb. lots, N. Y. or Chicago lb. 2.05 - —
5-24 lb. lots, ens., N. Y. or Chicago lb. 2.15 - —

Waxes

Wax quotations, formerly grouped under one heading, are now listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

Wheat germ oil, 5-gal. dms. gal.11.25 - —
White lead (see Lead, white).
White mineral oil (see Mineral oil, white)
White pine bark rossed bls lb .15 .19
White precipitate, USP powd. dms., l.c.l. lb. 6.55 - —
Whiting (see Calcium carbonate)
Wild cherry bark, thin, nat., bls lb. .20 - —
rossed, bls lb. .21 - —
Wintergreen oil, USP, nat., northern, ens. lb. 6.35 -10.30
southern, ens lb. 4.50 -7.50
Wintergreen oil, syn. (see Methyl salicylate)
Witch hazel bark, bls lb. .16 .17
leaves, bls lb. .27 - —
Wollastonite fine, bgs., c.l., works ton.39 59 - —
l.c.l., ex whse ton 56 00 - —
medium, bgs., c.l., works ton 27 00 - —
l.c.l. ex whse ton.44 00 - —
Wood alcohol, (see Methanol)
Wood oil (see Tung oil).
Woolfat, crude (see Degras).
USP (see Lanolin)
Wormseed oil (see Chenopodium oil, NF).
Levant, bgs lb 4.25 4.50
45°-47°C. dms. c.l. same basis
Wormwood oil, ens lb. 5.50 - —

X

Xylene, coaltar, indust., tanks, works:—
Bethlehem, Pa gal .34 - —
Birmingham dist. gal .32 - —
Chicago dist gal .35 - —
Cleveland dist gal .34½- —
Geneva, Utah gal .29 - —
Johnstown, Pa. gal .33 - —
Lackawanna, N. Y. gal .35 - —
Lone Star, Tex. gal .33 - —
Lorain, Ohio gal .33 - —
Middletown, Ohio gal .34 - —
Minnequa, Colo gal .34 - —
Philadelphia dist. gal .34 - —
Pittsburgh dist. gal .32 - —
Sparrows Point, Md gal .34 - —
Terre Haute, Ind. gal .34 - —
Youngstown, Ohio gal .32½- —
Petroleum, indust., tanks, works:—
Bayonne, N. J. gal. .34 - .35½
Baytown, Tex. gal. .33 - .35½
Chicago, Ill. gal. .35 - .35½
Houston, Tex gal .33 - —
Philadelphia, Pa. gal .34 - —
Providence, R. I. gal .33 - .35½
Wood River, Ill. gal .35 - —
Xylenol cryst. 58°-60°C., m.p., dms., l.c.l., works lb. .40 - —
56°-58°C., dms. l.c.l., works, frt. equald lb. .30 - —
45-47°C., same basis lb. .212 - —
l.c.l., same basis lb. .215 - —
tanks, same basis lb. .199 - —
fraction, b.r., 7°-9°C., dry above 227°C., dms., c.l., same basis gal. .95 - —
l.c.l., same basis gal. .99 - —
tanks, same basis gal. .85 - —
dry at or below 227°C., dms., c.l., same basis gal. 1.11 - —
l.c.l., same basis gal. 1.14 - —
tanks, same basis gal. 1.00 - —
Xylidines, mixed, o-m-p, dms., c.l. or t.l., works lb. .39 - —
l.c.l. same basis lb. .40 - —
tanks, same basis lb. .38 - —

Xylol

Xylol quotations, both coaltar and petroleum, may now be found under Xylene.

Y

Yara, yara, ens lb. 2.15 2.65
Yeast, brewer's, dry USP 50 int'l B units per gram, 100-lb. dms lb. .47 - —
90 int'l B units per gram, 100-lb dms lb .52 - —
200 int'l B units per gram, 100 lb. dms lb. .56 - —
300 int'l B units per gram, 100-lb dms lb. .60 - —
debittered USP Saccharomyces dlvd lb .27 - —
Torula USP dlvd lb .18 - —

Yellow Pigments

Yellow pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow

Yerba santa, leaves, bls lb .40 .42
Ylang-ylang oil, Bourbon, bots. lb.14.00 -16.00
extra, bots lb.28.00 -40.00
Madagascar, bots lb. No stocks.
Yohimbine hydrochloride, bots, tins. oz. 3.75 4.25

Z

Zein, bgs. 36,000 lb. lots or more lb .38 - —
1,000 to 36,000 lb. lots, works lb .40 - —
smaller lots works lb .43 - —
Zinc acetate, NF VIII dms lb .53 - —
tech., dms., works lb. .29½- .29¾
Borate, bgs., c.l., dlvd E lb. .192 - —
l.c.l., dlvd E lb .202 - —
Zinc chloride, NF, gran., dms. lb. .42 - —
precip., powd., dms. lb. .26 - —
soln. 50% dms. c.l. works 100 lbs 5.80 - —
l.c.l. works 100 lbs 6.40 - —
tanks, works 100 lbs 5.15 - —
tech., fused, dms., c.l., works. 100 lbs.10.70 - —
l.c.l., works 100 lbs.11.20 - —
gran. fib dms. c.l., works 100 lbs.11.45 - —
l.c.l. works 100 lbs.11.95 - —
Zinc chromate, bbls., dlvd lb. .29 - —
Basic, bbls., dlvd lb. .34 - —
Zinc cyanide, kgs., 1,000-lb. lots or more works lb. .523 - —
smaller lots works lb .543 - —
Dust, pigment, bbls c.l. works lb .17½- —
t.c.l. works lb .18½ - —
Fluoride, bbls., works lb. .49 - .50
Hydrosulfite, dms., c.l., frt. alld. lb. .22 - —
l.c.l., frt. alld lb. .24 - —
Metal, prime western, slabs, E. St. Louis lb. .13½- —
New York lb. .14 - —
Naphthenate, liq. 8% Zn., dms., frt. Alld lb. .24½- —
10% Zn dms frt alld lb. .30 - —
Nitrate, tech. cryst. bbls. works. lb .20 - —
Oxide, pigment, American process, lead-free, bgs., c.l., frt. alld lb. .14½- —
l.c.l. same basis lb. .15½- —
leaded, 35% bgs., c.l., mills frt. alld. lb. .15½- —
l.c.l. same basis lb. .16½- —
50%, bgs., c.l., same basis lb. .15⅞- —
l.c.l. same basis lb. .16⅞- —
French process, comi., green seal, bgs., c.l., frt. alld lb. .15¾- —
l.c.l., same basis lb. .16¾- —
red seal bgs., c.l., same basis lb. .15¼- —
l.c.l. same basis lb. .16¼- —
white seal, bgs., c.l., same basis lb. .16¼- —
l.c.l. same basis lb. .17¼- —
USP, ctns., c.l., frt. alld. lb. .17¼- —
l.c.l. same basis lb. .18¼ - —
Zinc oxide Pac. Coast prices 1c. higher.
Phenolsulfonate NF gran., dms. lb. .43 - .44
powd., dms lb. .46 - .53
Resinate, precip. 7.2-7.6% Zn., dms., frt. alld. lb. .29 - —
Silicofluoride, dms., works lb. .12½- .14
Stearate, tech., USP, ctns., c.l. lb. .41 - —
l.c.l. lb. .42 - .46
Sulfate, powd., monohydrate, 36% Zn bgs. c.l. dlvd E 100 lbs 8.75 - —
l.c.l., dlvd E 100 lbs 9.75 - —
Zinc sulfate in bbls. 40c. higher.
USP gran dms lb .24 - —
Sulfide, pure bgs., c.l., dlvd lb. .2530- —
Undecylenate, dms lb. 2.00 - —
Yellow (see Yellow zinc)
Zinc-ammonium chloride, bgs., c.l., works 100 lbs.10.25 - —
bbls., c.l., works 100 lbs.10.85 - —
l.c.l., works 100 lbs.11.35 - —
Zinc-formaldehyde sulfoxylate, basic, dms., c.l lb .25½- —
l.c.l. lb .26 - —
Zircon (G) gran. bgs. c.l., works. lb. .03¼- —
5 tons to c.l., works lb. .03¾- —
1 ton to 9,999-lb lots, works. lb. .04 - —
smaller lots works lb. .06¼- —
Milled, bgs., c.l., works lb. .04¼- —
5 tons to c.l., works lb. .04⅝- —
1 ton to 9,999-lb lots, works. lb. .04⅝- —
500-1,999-lb lots, works lb .07½- —
Zircon (G) in barrels 1c. higher.
Zirconium acetate, 13% soln., ZrO_2, c.l 30,000 lbs minimum, works lb. 7.25 - 9.00
Zirconium hydride, powd., dms., Oxide, CP, white, grd. bbls., or bgs., works lb. 1.50 - —
Electric-fused, lump, bags, 500 to 1,999-lb. lots., works lb. .45½- —
smaller lots, works. lb. .49 - —
Electric-fused, milled bgs., c.l., works lb. .59 - —
5-ton lots, works lb. .59½- —
1 ton to 9,999-lb. lots, works lb. .60 - —
500 to 1,999-lb. lots, works lb. .60½- —
smaller lots, works. lb. .63 - —
Opacifier grade, 85-90% ZrO_2, bgs. lb. .27 - .59
Stabilized Oxide, 91% ZrO_2, milled, bgs., lb. .62 - .83
Oxychloride, cryst. ctns., 5-ton lots, works lb. .35½ —

Sulfuric Acid, Fertilizers Key Factors in Soviet

—Continued from page 5

production of industrial nitrogen should increase from the 1955 level of 130,000 to 150,000 tons to about 300,000 tons N in 1960.

Nitrogen Output by 1960

Considering this, the entire nitrogen output of the Soviet Union, reckoned by 900,000 tons N in 1955, should reach an estimated 1,900,000 tons N in 1960.

The following table represents estimated 1956 production of specified chemicals in the Soviet Union, and proposed goals of the current five-year plan in 1960:

Production

	Metric Tons	
	1956	1960
Sulfuric acid	4,300,000	7,060,000
Fertilizers (nitrogen, phosphate and potash fertilizers)	10,900,000	19,600,000
Caustic soda	*565,000	1,000,000
Soda ash	1,500,000	2,400,000
Dyes	77,000	.....
Chemical fibers	129,000*	330,000
Synthetic rubber	*350,000	770,000
Chemical equipment	109,000	208,000

* 1955 figures. 1956 figures not available.

Sodium carbonate production reached 1.5 million metric tons in 1956, a figure nearly triple that of prewar output. Chief production areas for soda are located in the Urals, the Donetz basin, and in Baku. Moreover, natural soda ash is also recovered.

Caustic soda production amounted to 565,000 tons in 1955, and an increase to 1 million tons annually by 1960 is foreseen. Manufacture is achieved through causticization and also through electrolysis. The latter-named process will be pushed hard, because increasing demands are made on chlorine, which is necessary for organic synthesis.

Calcium Carbide Output

For calcium carbide, the five-year plan makes no provision. Production for 1955 is estimated at 500,000 tons, less than that of West Germany (820,000 tons and the United States (730,000 tons).

Petrochemicals are now in full development in the Soviet. Previously, the relatively low estate of the carbide industry made it unavailable for a many-faceted expansion in organic synthesis.

The utilization of natural gas, refinery gas, and other petroleum derivatives for chemical purposes began for all practical purposes only two years ago.

Now, however, the petrochemical industry finds itself in full development. The present five-year plan calls for a broad foundation for production of synthetic rubber, chemical fibers, synthetic detergents, resins and paint materials founded upon petroleum and natural gas.

The increase in output of fractionated gases goes hand in hand with climbing petroleum production. In 1956 production of petroleum in the Soviet Union is reckoned at 84 million metric tons, as against 71 million tons in 1955. In 1957, production of 97 million tons is expected, and in 1960, output of petroleum should reach 135 million tons.

Coal Chemical Outlook Good

The best developed branch of the Russian chemical industry, according to *Chemische Industrie*, is the coal chemical industry. Huge tar production gives the possibility of recovery of countless tar distillation products which can be produced in increasing volume. Even West Germany counts itself among the importers of Soviet tar products.

On the foundation of Russian tar, a mighty coaltar dye industry has developed. In 1956, some 77,000 metric tons will have been produced.

A significant part will have been exported, particularly to Red China. This fact is noteworthy in that German dye exports to China in recent times have declined sharply.

In fact, the German magazine points out, the Russians produce only simple types of dyes, for example, sulfur and azodyes, but the Chinese seem to have satisfied themselves with these.

As in western nations, great emphasis is being placed on construction of the chemical fiber and synthetic resin industry in the Russian chemical complex.

Today, Russian production of synthetic fibers is smaller than in East Germany. But by 1960, they will try to achieve a goal of triple the present output.

It is noted that due to the current rudimentary state of polymer chemistry in Russia, development of fully synthetic fibers is expected to be achieved with outside help.

East Germany has furnished assistance on polyamide fibers, as well as those of the acrylonitrile type. In the realm of polyesters, a way is currently being paved in order that assistance of western nations may be obtained.

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Pentobarbital Sodium
Phenobarbital
Phenobarbital Calcium
Phenobarbital Sodium
Secobarbital Sodium
Theophylline

AROMATIC and FLAVORING CHEMICALS

Benzyl Alcohol
Cinnamic Acid
Diacetyl
Ethyl Phenyl Acetate
Phenyl Acetic Acid

TECHNICAL CHEMICALS

Allyl Acetone
Benzaldehyde
Benzilic Acid
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Benzyl Alcohol
Benzyl Chloride
Benzyl Cyanide
Cyanoacetamide
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2,5-Dimethyl Hexadiene-2,4
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1-Methylpropyl-Diethyl-Malonate
Phenyl Diethyl Malonate

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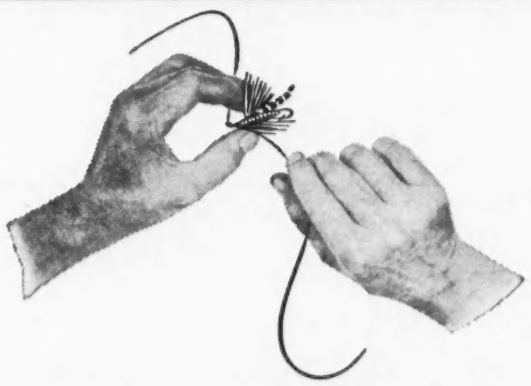

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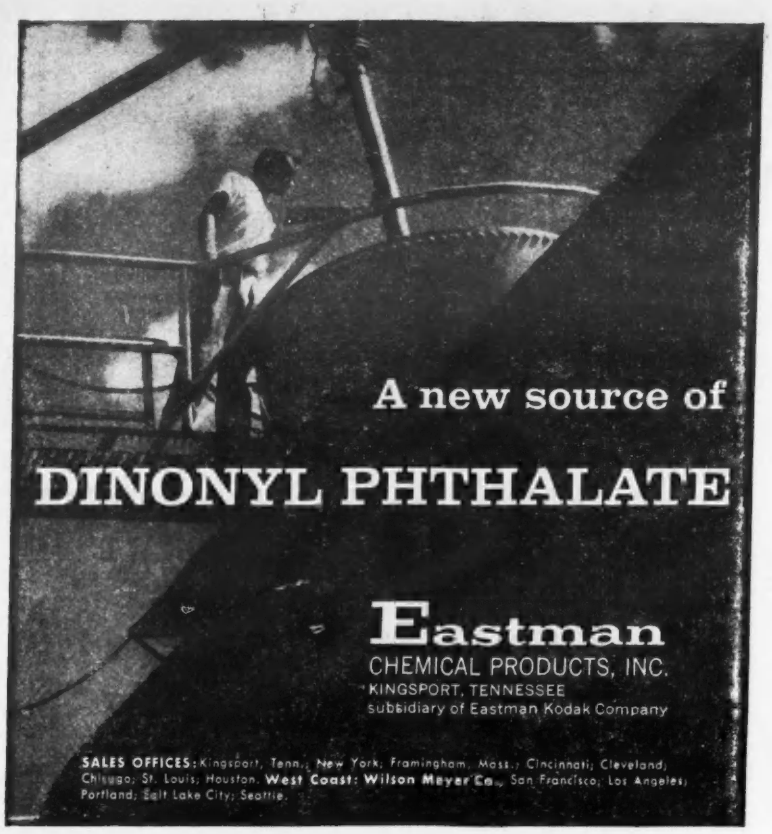
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Coatings Materials

Indications are that the coatings trade will begin the second quarter without notable cost increases. To date none of the manufacturers of plasticizers or large volume synthetic resins have announced price advances. In pigments the only advance experienced by the industry is the ½ cent hike in iron oxide scheduled to go in effect today. Behind this steadiness is the fact than many of the basic colors and a few synthetic resins were increased in price at the start of the year. Also, basic raw materials, such as phthalic anhydride, lead, zinc and copper are not notably firm right now because of a downturn in activity of several major sections of the economy.

Production of coatings during the month of January was reported last week by the Department of Commerce at 42,669,000 gallons, as compared with a total of 34,499,000 gallons during December. Factory shipments were valued at $125,401,000 as against $97,308,000 in December. A breakdown of these figures is provided in the table at the bottom of this page.

The price of Argentine casein was steady last week at a range of 22½c. to 23½c. per pound, duty paid, for April shipment. The casein situation in other producing areas was substantially unchanged, with New Zealand premium material available in limited quantities and Europe producing mainly for its own needs.

Price Trends

Advanced
Iron oxide, ½c. per lb.

Reduced
None.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	March 23, 1956
100.77	100.77	100.79	100.08

For Current Prices see Page 9

Prime Pigments

Aluminum Paste, Powder—Net shipments of atomized and grained powder during the month of January amounted to 675,000 pounds, the Department of Commerce reported last week. Shipments of flaked powder and paste totaled 401,000 pounds and 894,000 pounds, respectively. These figures compare with December shipments of 544,000 pounds of atomized and grained powder, 400,000 pounds of flaked powder and 758,000 pounds of paste. Comparable figures for January 1956 were, respectively, 668,000 pounds, 448,000 pounds, and 1,016,000 pounds the Department noted.

Copper Pigments—Metal continued to hold steady, with a similar tone prevailing in the oxides. While supply of copper is still on the heavy side, it is not so far in excess of demand as previously due to cutbacks in production by major factors in the field. Oxides have been moving well to the paint trade for use in outdoor coatings.

Earth Colors—Effective today a major producer is advancing quotations on iron oxide ¼c. to ½c. per pound to offset the cost increases that have intervened since prices were last advanced a year ago.

Lead Pigments—Prices were uniformly steady at levels now in effect for over a year. Producers are satisfied with the pace of buying interest evinced by the rubber, paint and automobile industries. All grades of material are amply available for the spring market.

Mercury Lithopones—These materials, introduced somewhat over a year ago, have found a fairly substantial market in the paint trade. However, for many operations, customers have found the selenide lithopones preferable and so have been willing to continue to pay the higher price. Incidentally, because of the lower price now in effect on selenium, the differential is not as broad as previously.

Zinc Pigments—Good quantities of material are moving to the account of the rubber and paint trades, producers report. The upward movement of business volume reflects seasonally increased industrial activity. Prices are steady and unchanged in response to stability in the basic metal. Other costs, which have risen slightly over the past year, have been absorbed.

Lacquer Materials

The second quarter appears about to commence without any price changes in the plasticizers. There is still a lot of dickering and price competition in dioctyl quotations, but official listings have been left unchanged at a range of 28c. to 28½c. per pound, tankcars. The phthalate group as a whole show no notable upward pressure. The basic material, anhydride, is currently amply available and steady in price. Other costs have not risen appreciably since October, when diethyl and dimethyl were last advanced.

Another plasticizer group which is on a relatively steady costs basis comprises the citrates. Citric acid has been unchanged in price for over a year, and while other costs have risen, the company has so far been able to absorb them due to expansion in business volume.

A fairly good seasonal market is reported for plasticizers, but in certain quarters disappointment has been expressed over the current rate of industrial activity. Effects of the slowdown in building activity, in capital expansion as well as housing, have been felt by producers. And in areas where buying interest has been particularly good, brisk competition has kept the market from being entirely satisfactory from the producers' point of view.

Miscellaneous

Casein—The price of Argentine material was steady in a range of 22½c. to 23½c. per pound, duty paid, for April shipment. Supply in the Argentine was reported to be in good balance with demand.

The situation in other producing areas has not changed. New Zealand casein continues available in limited quantities at a price about 2c. higher than the Argentine quotation. Europe for the past two years has been producing mainly for its own needs, and while some material has been exported there, the rate of imports is said to be greater than the export volume.

Dried Blood, Soluble — The latest report from Chicago lists dried blood prices at 13c. to 14c. per pound in carlots; 15c. to 17c. per pound in truckloads, and 15½c. to 35½c. per pound in smaller quantities. These prices are unchanged from previously.

Stearates—The higher quotations that followed in the wake of an advance in stearic acid have been firmly held by all producers. Paint trade buying of these materials has been up to seasonal par, producers report. Supplies are available for all consuming needs.

Natural Resins

Gum—As previously, business volume was variable and confined mainly to immediate requirements. Reports from source indicate adequate supplies of all

Coatings Shipments, Output: January

	Factory shipments Dollars		Reported production Gallons	
	January	December	January	December
Trade sales	$70,862,000	$51,663,000	21,025,000	16,428,000
Industrial sales, total	54,539,000	45,645,000	21,182,000	17,692,000
Paint and varnish	40,452,000	33,026,000	15,824,000	13,016,000
Lacquer	14,087,000	12,619,000	5,358,000	4,676,000
Overall totals	$125,401,000	$97,308,000	*42,669,000	*34,499,000

* Detail does not add to total because some respondents reported only total production without indicating allocation as to trade or industrial sales.

Coatings Materials

copals and dammars currently in demand here. The materials listed as out of stock have been rejected by consumers in favor of substitute gums.

Shellac—Market was steady at previous prices for orange and bleached grades. Both groups of material fell substantially in price during January and February. This was reported to be more a reflection of execessive supply in India then lack of buying demand here. Following the price declines an increment in consuming interest was reported, since the easier price tempted consumers away from substitute materials.

Naval Stores

The Department of Agriculture last week announced a 1957 price support program for naval stores substantially the same as the one in effect previously. The few minor changes include termination of supports on grade I because of insufficient production and an increase of 20c. in the discount on rosin grades N and below. The latter change is intended to reflect the increasing market spread between the top and middle grades, the Department said.

The 1957 support level of $28.29 per standard barrel of pine gum, processed basis, reflects 90 percent of the parity price of crude pine gum, unprocessed basis, as of February 15, 1957. Initial loan rates, the Department announced, will be 51c. per gallon of turpentine and $7.67 per 100 pounds of gum rosin applicable to the average WG grade, with rates 10c. higher for grades X and WW, and 30c. lower for grades N, M and K.

Production of gum naval stores in February amounted to 4,702 barrels of turpentine and 15,090 drums of rosin, according to the crop reporting board of the Department of Agriculture. With one month remaining in the crop year, production is running approximately 3 percent below last year's total, the department reported. Wood turpentine output was 1,410 drums lower in February than a year ago, while steam distilled rosin production was 4,000 drums lower. CCC holdings of gum turpentine were about unchanged from the previous month, but rosin socks were down 17,560 drums.

Pine Gum—For the week ended March 9, the average price per standard barrel of crude pine gum was reported at $26.38, as compared with $25.58 during the previous week, and $26.92 a year ago. The volume of gum deliveries to plants was 1,400 barrels, as against 900 barrels the previous week and 1,202 barrels a year ago. Average per barrel content was reported as 10.56 gallons of turpentine and 297.9 pounds of rosin. Gum grading percentages were as follows:—WW, 4; WG, 11; N, 40; M, 35, and K and below, 10.

Rosin, Gum

(USDA, per 100 lbs.)

	Fri. Mar. 15	Mon. Mar. 18	Tues. Mar. 19	Wed. Mar. 20	Thur. Mar. 21
Drums					
K	...	$7.85	...	...	...
M	...	7.78	...	$7.70	...
N	...	7.90	...	...	...
WG	$8.80	...	$8.60§	...	$8.75
WW	9.20	8.79§	8.98	...	9.00
Bags					
G	...	7.50§	...	...	...
M	...	7.65	...	...	...
WG	...	8.65	...	...	...

Tankcars (for week ended March 15)—M or better, $7.67§

Sales, USDA

80* 1,603* 240* 160* 480*

New York

(per 100 lbs., c.l., Friday)

WW, $10.30; WG, $9.90; N, $9.25; B through M, $9.00

Turpentine, Gum

(USDA, per gal., 7.2 lbs.)

Price	.576	...	.68	...	.5825
Sales	16,000¶	...	4,000¶	...	6,000¶

New York, Friday, per gal. 7 lbs., tankcars, 66c., l.c.l., 82c.

*Drums equivalent. ¶Gallons. §Average price.

FEMA Schedules

—*Continued from page 7*

some of the problems facing industry at the present time.

The vanilla research project of the FEMA, being conducted by Boyce Thompson Institute, will be discussed by Dr. George McNew, followed by a report by Dr. H. P. Burchfield on the progress made to date, with emphasis on the infra-red spectroscopic characteristic, of pure vanilla components, and a report on the investigation of vanilla amino acids.

Another talk will be presented by Bernard L. Lewis, of Bernard L. Lewis, Inc., on the subject of vanilla publicity.

Dr. Bernard L. Oser, of Food Research Laboratories, has prepared a paper on "The Role of Flavor Compositions in the Current Food Additive Situation."

Arthur T. Schramm, of National Aniline Division of Allied Chemical & Dye Corporation, chairman of the committee representing color manufacturers in the endeavor to seek changes in laws to permit continued use of certified colors on a more realistic basis, has prepared a talk for the association entitled "Certified Colors—Facts Behind the Headlines."

Other talks important to extract manufacturers will be "The Vanilla Bean Market," by Ray Schlotterer, executive secretary of the Vanilla Bean Association; the annual report of John Hall, executive secretary and general counsel of the FEMA; the report of the scientific research committee by Dr. A. S. Wendt, Fred Fear & Co.; the report on vanilla research by Dr. George McNew, of Boyce Thompson Institute; a report on organic acids in vanilla by R. Way, of Crescent Manufacturing Company, and a report of the food additive committee by Harold Janovsky, of Fritzsche Brothers, Inc.

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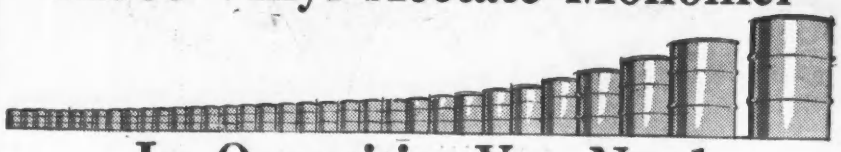

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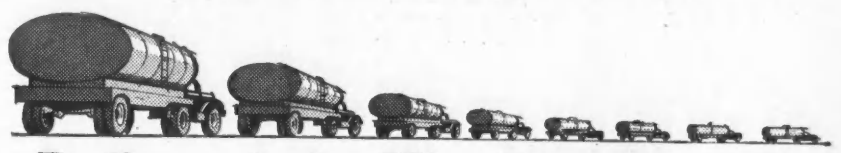

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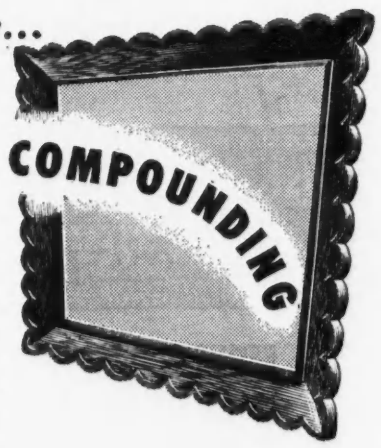

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Polyethylene Resin Item Is Introduced by duPont

"Alathon 5F" polyethylene resin, in a new black formulation, has been introduced commercially by E. I. duPont de Nemours & Co., Wilmington, Del., as a film and paper-coating resin for applications where resistance to outdoor weathering is important.

Products extruded from "Alathon 5F" are said to be notably free of pinholes and surface defects.

The complete dispersion of carbon black in film made from "Alathon 5F" insures greater protection against degradation caused by sunlight, according to duPont.

Grace to Build

—*Continued from page 4*

available as a "job shop" to serve the needs of designers and builders of atomic power reactors.

The plant will not make finished fuel elements, but rather would concentrate on making the basic thorium and uranium metals, alloys or oxides for fuel element fabricators, which are now supplied by the Government from its atomic energy plants throughout the country.

In a statement announcing the new plant, J. Peter Grace, company president, disclosed that the plant would be a "service facility" as well as a manufacturing operation. "We are very hopeful that this plant will serve as a nucleus around which the steadily widening number of companies interested in the atomic energy power field will help us build a free enterprise center for atomic fuels advanced research and for a pilot-plant-stage development laboratory."

Explosives Transport

—*Continued from page 3*

mon carriers. In addition, the word "knowingly" would be deleted from what is now section 835 so that violators cannot plead ignorance of the law as a defense.

Mr. Clarke said that the transportation of explosives act has served its purposes well in providing the means by which a high standard of protection has been afforded in an area that its fraught with unusual dangers to the public but "we believe it essential to re-examine the present provisions of the law in the light of technological advances."

He pointed out that at the present time "we have no regulations governing the transportation of etiologic agents." The bill would place the transportation of these organisms squarely within the jurisdiction of the commission. Although radioactive materials have been classified as poisons by regulations of the ICC, it is proposed to name this class of commodities specifically so as to remove any doubt as to the commission's jurisdiction.

Attempts to Eliminate Anomaly

In making the law apply to contract and private motor carriers in the same manner as it now applies to common carriers, the intention is to eliminate something of an anomaly in which the common carriers can be subjected to penalties of $10,000 or ten years for violations while private and contract carriers are subject to a maximum of only $100.

Mr. Clarke explained that the revision would make those provisions of existing law relating to packing, marking, and so forth, of explosives and other dangerous articles applicable to shippers tendering goods to interstate carriers irrespective of whether the shipments are destined for movement in interstate, intrastate, or foreign commerce.

Also, the bill would extend the provisions of law to include all "for-hire" carriers of passengers by land, and the present exemption of specific quantities of various articles would be changed so as to authorize the commission to prescribe the kind, amount, and conditions under which such articles may be so transported.

He explained that as the act now reads, the transportation of liquid nitroglycerine or other like explosive by common carriers is absolutely prohibited. However, no such prohibition exists against the transportation of such commodities by contract or private motor carriers.

Heyden Newport Develops

—*Continued from page 5*

color and color retention and flexibility. It also reduces phthalic anhydride losses.

Heyden Newport also revealed that it is hoping for big things from the polychlorobenzoic acid herbicides it now has under development.

The company is heartened by last year's extensive field tests which indicated a variety of promising commercial uses for the materials and, as a result, may initiate test marketing during the 1957 growing season.

Along with this disclosure, made in its annual report, Heyden noted that it has greatly improved its pentaerythritol and resorcinol processes.

A reprint of a paper by Dr. W. M. Kraft describing the high-polymer alkyd technic is available from Heyden Newport's technical sales department, 342 Madison avenue, New York 17.

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Oils, Fats and Waxes

Consuming demand for oils and fats lacked volume and was restricted in most instances to actual requirements last week. Edible oils continued unsettled. Soybean and cottonseed oils were irregular and closed sharply lower. Corn oil was off slightly. Peanut oil also sold at lower levels. Trading in crude coconut oil was light and sales took place at lower levels. Copra was easier and nominal.

Price trend of tallow and greases was lower and quotations for all grades dropped slightly. Sales were moderate at the lower levels for domestic delivery, while export business continued dull and featureless. Consuming inquiry for edible fats also was slow. Edible tallow declined one half cent per pound and oleo stearine was off 1 cent per pound.

Consumers of drying oils continued to operate in a hand to mouth manner. Oiticica oil continued to move upward as a result of the higher cost of replacements due to smaller Brazilian seed crop. Trading was light at the higher levels. Tung oil remained steady, with trading restricted to nearby delivery. Linseed oil was reduced, reflecting the decline of flaxseed. Demand for linseed oil was confined to fill-in needs, though withdrawals of oil against current showed moderate improvement last week. Trading in crude menhaden oil was reported slow, with producers and exporters marking time. New crop oil was unchanged and well held.

Soybean meal was easier and off $1 per ton. New business was slow, but deliveries against contracts were reported in good request. Cottonseed also was lower, while linseed meal was higher for nearby delivery.

Price Trends

Advanced

Linseed meal, 50c. to $1 per ton.
Oiticica oil, ¼c. per lb.

Reduced

Cocoa butter, 2c. per lb.
Coconut oil, crude, ⅛c. per lb.
Corn oil, crude, ¼c. per lb.
Refd., ¼c. per lb.
Copra, $2.50 per ton.
Cottonseed meal, 50c. per ton.
Cottonseed oil, crude, ⅝c. per lb.
Refd., ⅝c. per lb.
Greases, ½c. per lb.
Linseed oil, acid, 2/10c. per lb.
Linseed oil, 2/10c. per lb.
Oleo stearine, 1c. per lb.
Peanut meal, $1.50 per ton.
Peanut oil, crude, ¼c. per lb.
Refd., ¼c. per lb.
Soybean meal, $1 per ton.
Soybean oil, crude, ½c. per lb.
Refd., ½c. per lb.
Tallow, edible, ½c. per lb.
Inedible, ⅛c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	March 23, 1956
119.02	119.64	120.19	102.60

For Current Prices See Page 9

Vegetable Oils

Castor—No. 1 Brazilian oil remained steady, with trading reported at 20¾c. per pound, tankcars, New York, prompt delivery. Domestic oil was unchanged and moved in fair volume for actual needs.

Coconut—Crude was easy with trading at 10⅞c. per pound, tankcars, f.o.b. Pacific coast and 11¾c., New York, prompt delivery.

Corn—Business was spotty, with sales reported at 13⅞c. per pound, tankcars, f.o.b. mills, prompt delivery. Refined was held at 17.54 per pound, tankcars, New York, prompt delivery.

Cottonseed—Futures continued unsettled last week, reflecting slow consuming demand; lack of export business, combined with lower allied markets. Trading was chiefly professional, with trade activity limited. The approval by the Senate for an additional $1 billion for the PL.480 program for the disposal of surplus commodities and the removal of the present ban on barter to Soviet countries temporarily stiffened the market and prices advanced fractionally under heavy trading chiefly short covering. The advance however was short lived under liquidation and quotations reached new lows for this move. Consuming inquiry for refined continued inactive and salad oil declined to 16⅜c. per pound, tankcars, New York, prompt delivery.

Crude cottonseed oil was easy and lower. Business was light and spotty. Tankcars were quoted at 12⅞c. Nom. per pound, f.o.b. mills, in the southeast Valley and Waco and 12⅝c. Nom. Lubbock.

Linseed—Lower flaxseed was reflected in oil and prices schedule was reduced 2/10c per pound. Raw oil was quoted at 13c. per pound, tankcars, Minneapolis, March-June delivery and 13.3c., exwarehouse. Deliveries against current contracts improved during the past week.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, March 22, follow:

	Sales	High	Low	Close
		Cents per pound		
May	1,137	16.01	15.02	15.11S
July	854	16.08	15.08	15.16S
Sept.	282	15.87	14.90	15.09S
Oct.	162	15.63	14.90	14.97S
Dec.	194	15.54	14.75	14.90S
Mar. (1958)	58	15.27	14.77	14.90@14.91
May	5	15.40	15.10	14.80@14.90

Total sales and switches, 2,661.

Flaxseed—Farmers intentions to plant flaxseed in 1957 were reported at 5,839,000 acres by the Department of Agriculture, compared with 5,862,000 last year and 10-year 1946-55 average of 4,513,000 acres. Canadian intention to plant flaxseed in 1957 was indicated at 3,648,000 acres compared with 3,139,000 last year.

Minneapolis.—To-arrive bookings of flaxseed at Minneapolis increased moderately ahead of 5c. price decline. Only one or two crushers were active buyers, others remaining on the side lines. Bids were down to $3.20 a bushel, spot and to-arrive, basis Minneapolis. Current level is 5c. under 1957 crop loan price and offerings stopped abruptly. The Agriculture department released a report showing flaxseed under price support program, after redemptions, at 16,755,506 bushels as of February 15.

Oiticica—Higher cost of replacements further stiffened this market. Tankcars were advanced to 17¼c. per pound, tankcars, New York, with light sales reported thereat for immediate delivery. Drums were higher at 18¾c. to 19¼c. per pound, spot as to quantity.

Olive—Increased offers of Tunisian oil on spot and slow demand weakened the market and prices declined to $3.10 to $3.20 per gallon, drums, duty paid, according to quantity. Virgin Tunisian for prompt shipment was offered at $74 per 100 kilos, c. and f. New York. Spanish oil on spot was scarce and merely nominal at $3.70 per gallon, drums, spot duty paid. Offers for shipment from Spain were restricted to cases. Drums were not available.

Peanut—Crude was lower with crude sales noted at 14¼c. per pound, tankcars, f.o.b. mills, prompt shipment. Refined was reduced to 18c. per pound, tankcars, New York basis.

Farmers intentions to plant peanuts in 1957 were indicated at 1,834,000 acres by the Department of Agriculture against 1,844,000 in 1956 and 10-year 1946-55 average of 2,706,000 acres.

Soybean—This market continued unsettled and registered sharp declines last week. Crude was lower at 12⅝c. per pound, tankcars, Decatur, March delivery; 12½c. April; 12¼c. May and 12⅛c. per

Soybean Oil Futures

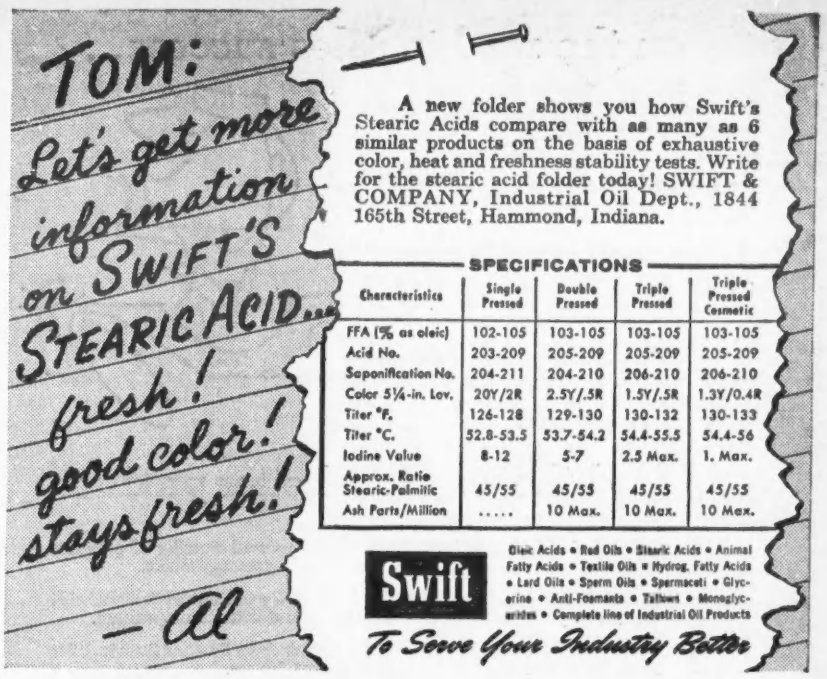
Sales and prices of crude soybean oil futures in tankcars (60,000 pounds) on the New York Produce Exchange for the week ended Friday, March 22, follow:

	Sales	High	Low	Close
		Cents per pound		
Mar.	3	13.14	13.10	Expired
May	11	12.60	12.20	12.23@12.25
July	68	12.49	11.85	11.90S
Sept.	2	12.00	11.75	11.85@11.90
Oct.	5	12.05	12.05	11.50@11.55

Total sales, 89 contracts.

Refined salad dropped to 15½c. per pound, tankcars, New York, prompt delivery.

Farmers intentions to plant soybeans in 1957 were reported at 22,745,000 acres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A new folder shows you how Swift's Stearic Acids compare with as many as 6 similar products on the basis of exhaustive color, heat and freshness stability tests. Write for the stearic acid folder today! SWIFT & COMPANY, Industrial Oil Dept., 1844 165th Street, Hammond, Indiana.
SPECIFICATIONS
Characteristics | Single Pressed | Double Pressed | Triple Pressed | Triple Pressed Cosmetic
FFA (% as oleic) | 102-105 | 103-105 | 103-105 | 103-105
Acid No. | 203-209 | 205-209 | 205-209 | 205-209
Saponification No. | 204-211 | 204-210 | 206-210 | 206-210
Color 5¼-in. Lov. | 20Y/2R | 2.5Y/.5R | 1.5Y/.5R | 1.3Y/0.4R
Titer °F. | 126-128 | 129-130 | 130-132 | 130-133
Titer °C. | 52.8-53.5 | 53.7-54.2 | 54.4-55.5 | 54.4-56
Iodine Value | 8-12 | 5-7 | 2.5 Max. | 1. Max.
Approx. Ratio Stearic-Palmitic | 45/55 | 45/55 | 45/55 | 45/55
Ash Parts/Million | ..... | 10 Max. | 10 Max. | 10 Max.
Swift
Oleic Acids • Red Oils • Stearic Acids • Animal Fatty Acids • Textile Oils • Hydrog. Fatty Acids • Lard Oils • Sperm Oils • Spermaceti • Glycerine • Anti-Foamants • Tallows • Monoglycerides • Complete line of Industrial Oil Products
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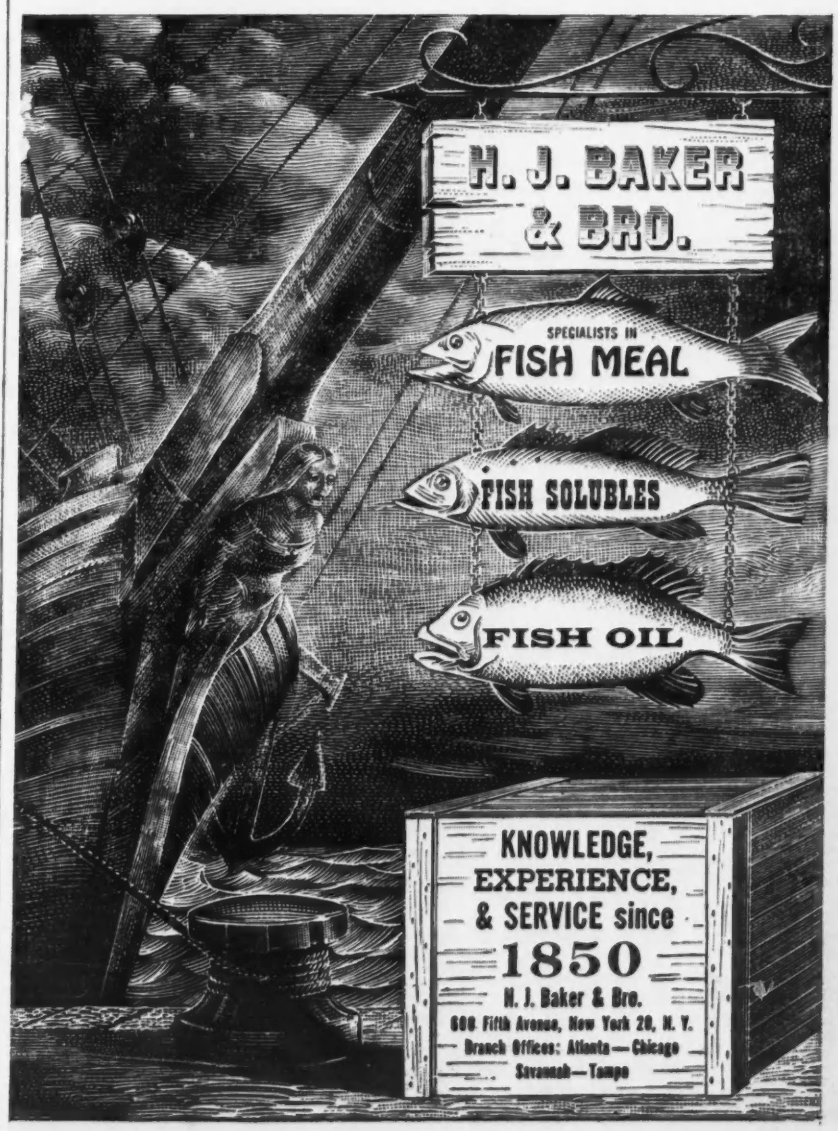
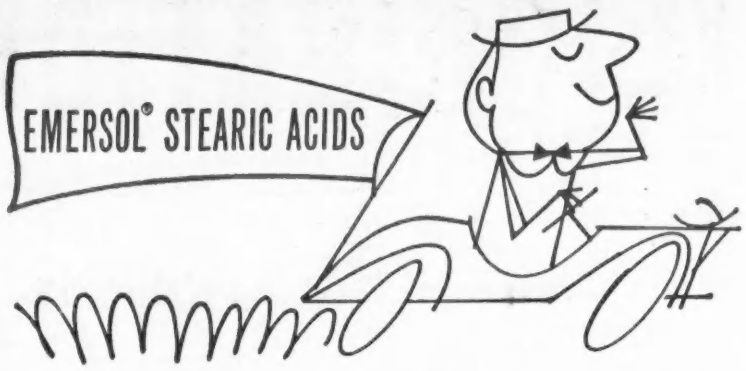
CERESINS — OZOKERITES
Palm Waxes — Resin Blends
Compounds and blends made to your specifications
CERITA WAXES



on the road to sales success...



lead the way to a better product

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2 **BETTER ODOR**—The excellent oxidation stability of Emersol Stearic Acids extends to your products...minimizes odors due to decomposition.

3 **BETTER KEEPING QUALITIES**—Products made from Emersol Stearic Acids resist rancidity and yellowing...stay fresher, longer.

4 **UNIFORM PERFORMANCE**—You can depend upon the rigidly-controlled uniformity of Emersol Stearic Acids to guarantee consistent performance of your products.

5 **HIGHEST QUALITY**—Because Emersol Stearic Acids set the standard for quality and purity, your products will be leaders, too.

6 **LOWEST COST**—Since grade for grade Emersol Stearic Acids cost no more than competitive products, these extra advantages cost you nothing—and you will find your processing costs are lower—your product quality higher.

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Titre	3°C. max.
Cloud Point	38°F. max.
Color 1" Lovibond Red	2 max.
Color 1" Lovibond Yellow	15 max.
Unsaponifiable	1.5% max.
Saponification Value	198 — 203
Acid Value	197 — 202
% F.F.A. as Oleic Acid	99 min.
Iodine Value (WIJS)	96 max.
Refractive Index 50°C. (Average)	1.4505

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Oils, Fats and Waxes

compared with 21,970,000 in 1956 and 10-year 1946—average of 14,939,000 acres.

Tung—Demand was spotty, with sales at 22¼c. per pound, tankcars, New York basis nearby and May-June delivery was quoted at 21¾c. to 21⅞c. tankcars as to seller. Drums were held at 23¾c to 24¼c. per pound, spot as to quantity.

Miscellaneous

Castor Beans—This market was quiet and nominal at $180 per ton, f.o.b. Brazilian ports.

Imports of castor beans, and castor oil, at New York and Philadelphia last week were as follows:

	Pounds	
	Beans	Oil
Last week	.....	1,516,000
Previous week	.....	3,686,000
Corresponding week, 1956	767,450	1,746,000
Total this year	.....	25,072,000
Corresponding period, 1956	13,673,250	19,837,000

Copra—Trading was slow. Prompt shipments were easier and nominal at $147.50 per ton, c.i.f. Pacific coast.

Fats and Greases

Greases—Trading was limited and took place at ⅛c. lower. Choice white was sold at 8¾c. per pound, tankcars, delivered and yellow at 6⅝c. and 6⅞c., same basis, depending upon quantity.

Lard—Buying interest lagged and market was merely nominal at 14⅜c. per pound, drums, Chicago.

Brazil has been authorized to purchase up to $5,415,000 worth of lard in drums under PL 480. Contracts between suppliers and importers made on or before March 22 through May 31 will be eligible for financing. Shipments may be made on or before March 22, but not later than June 29 and delivery c. and f. or c.i.f. Brazilian ports or f.o.b. or f.a.s. U. S. ports.

Pig production in 9 corn belt states this spring was estimated at 5,375,000 sows by the Department of Agriculture, compared with 5,362,000 a year ago.

Oleo Oil—This market was quiet. Extra ranged from 18c. to 18½c. per pound, drums, depending upon quantity. Oleo stearine was weak and lower. Prices ranged from 13c. to 13½c. drums, depending upon quantity and seller.

Tallow—Business was reported spotty. Prices were easy and off fractionally. Soapers bought bleachable at 7⅝c. per pound, tankcars, delivered. Prime was lower at 7⅜c.; special, 7c. and No. 1, 6⅞c. to 7c., same basis. Edible tallow was lower and available from 12½c. to 13c. tankcars, according to seller. Export business was slow. Fancy was quoted at 9⅛c. per pound, drums, f.a.s.

Tallow Futures

Sales and prices of bleachable tallow futures in tankcars (60,000 pounds) on the New York Produce Exchange for the Week ended Friday, March 22, follow:

No sales last week.

Cake and Meal

Cottonseed Meal — This market continued quiet. Supplies were light but buying interest was slow. Few oil mills in the southeast are still in operation. Forty-one percent old process was offered in limited quantities at $54.50 per ton, Memphis; $56.50, Alabama, $59, Georgia, South Carolina, March-April shipment.

Linseed Meal—Market was firmer. Prices were 50c. to $1 higher.

Minneapolis.—Nearby shipment was extremely scarce. Most crushers were out of the market. Quotations were steady to $1 higher. Re-sellers offered extracted meal at $55 to $56 a ton. Limited crusher offerings of extracted linseed meal, 34 percent protein, were at $56 a ton, bulk, in carlots, f.o.b., Minneapolis. Curtailed production by area crushers sparked

—*Continued on page 66*

For Domestic and Export
COTTONSEED MEAL AND CAKE
PEANUT MEAL-SOYABEAN MEAL
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BRILL EQUIPMENT CO.

DRYERS

SPECIALS

1—BUFLOVAK 3'x10' Stainless Steel Rotary Vac with reducer, dust collector and jet.
3—BUFLOVAK 42"x120" Atmospheric double drum.
1—ALLIS CHALMERS 7'x60' Rotary Dryer, ⅜" shell.
1—LINK BELT—5'2"x20' Roto-Louvre.

1—Hersey 1½'x12' Rotary Hot Air 304 S.S. with steam coils.
2—Devine 4'x9' single drum Atmospheric.
1—Buflovak single door Vacuum Shelf 15—42"x42" shelves.
3—Devine double door Vacuum Shelf 17 and 20—59"x78" shelves.
4—Tray Dryers, steam heated, 95 sq. ft. tray area.
3—Stokes Rotary Vac 4'x20', 30"x8', 18"x42".
1—Devine Rotating Vacuum 5'x10'.
3—Louisville Rotary Steam Tube 38"x25', 6'x40', 6'x50'.
4—Bartlett & Snow Rotary Dryers 6'x30', 7'x30', 8½'x35'.

MIXERS

2—Baker Perkins #17 DAM, 200 gal. jacketed, Sigma Blades.
2—Baker Perkins 100 and 50 gal., 316 S.S.. Sigma Blades.
5—Day "Cincinnatus" double arm 250 and 100 gals.
5—Steel jacketed Powder 50, 225 and 350 cu. ft.
1—Struthers-Wells 6'x9', 304 S.S. Rotating, jacketed.
1—4' dia., 304 S.S. Conical Blender, 3 HP motor.

MILLS

1—Devine 5'x10' steel jacketed Ball Mill.
3—Abbe Paterson 6'x8' unlined Ball Mills.
3—Abbe 5'x6', 4'x5', 3'x3½' Silex lined Pebble Mills.
3—Mikro Pulverizer Bantam and #2TH.
1—National 6"x12" Two-Roll Mill, motor driven.
5—Jeffrey Hammermills 20"x12", 15"x8", motor driven, NEW.

CENTRIFUGES

2—Sharples C-27, C-20 Super-D-Hydrators 316 S.S.
1—Sharples PY-14 Super-D-Canter, 304 S.S.
5—Bird 32"x50". 316 S.S. solid bowl, continuous, fume tight, 60 HP TEFC motors, New 1953.
2—Bird 18"x28", 36"x50" steel, continuous, solid bowl.
2—Bird 18"x28", 24"x38" Stainless Steel, Continuous, Solid Bowl.
2—Tolhurst 40" Suspended Steel Perforated 15 HP XP motors.
1—Bird 40" Suspended rubber covered, imperforate basket.
2—Bird 40" Suspended 347 S.S. perforated basket, TEFC motor.
1—AT&M 36" center-slung, rubber covered, perforated basket.
1—Fletcher 30" center slung 304 S.S., Perforated basket.

KETTLES, REACTORS, CONDENSERS, EVAPORATORS, TANKS

1—600 gal. 316 S.S. jacketed, agitated Reactor 200# internal pressure, 90# jacket pressure.
2—500 gal. 347 S.S. jacketed, agitated Reactors 300# int. pressure, 75# jacket pressure.
1—1000 gal. nickel clad, jacketed, agitated Reactor.
1—Glascote 500 gal. glass lined, jacketed, agitated Reactor.
3—500 gal. 316 S.S. closed, jacketed, agitated Tanks.
1—3500 gal. 304 S.S. Horizontal Tank 5'6" dia. x 16' long.
3—Unused 2500 gal. Vertical rubber lined Tanks 7'x9'.
1—10,000 gal. Aluminum Tank 10'x16', ½" shell, 25# W.P.
2—10'x30', 8'6"x25' Steel Horizontal Storage Tanks.
2—Kellogg Admiralty Tubes 2200 and 1800 sq ft.
1—Struthers-Wells 536 sq. ft. Heat Exchanger 304 S.S.

FILTERS

1—Oliver 8'x10' Monel Rotary Vacuum.
1—Eimco 18"x12", 316 S.S. Rotary Vacuum.
2—Feinc 3'x1', 316 S.S. Rotary Vacuum with vacuum and receiving Tanks.
1—Feinc 5'x3' Monel Rotary Vacuum String.
1—Oliver 5'3"x8' Steel Rotary Vacuum, totally enclosed.
1—Niagara 230-32 Pressure Filter, 230 sq. ft., 304 S.S.
2—Sparkler 33-S-28 Pressure Filters, 150 sq. ft., 304 S.S.
1—#12 Sweetland Filter, 48 leaves, 3" centers, 640 sq. ft.
4—Shriver 36"x36", 30"x30", c.i. Filter Presses, P&F, washing.

MISCELLANEOUS

10—Orville Simpson Rotex Sifters 60"x84", 40"x84".
3—Robinson Gyratory Sifters 30"x104", triple deck.
7—Stokes DD2, DS3, D3, B2, "R" and "F" Tablet Presses.
10—Nash Vacuum Pumps H7, H6, H5, L5, H4, TS7, #4, #2, AL-572.
2—Stokes #412G, 412B Vacuum Pumps, motor driven.
15—Chlorimet, Durimet and Duriron Centrifugal Pumps 1½" to 5".

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Priced Attractively for Immediate Shipment

EVAPORATOR, VACUUM PAN & STILLS

1—Artisan 450 sq. ft. Stainless Steel, Single Effect Evaporator complete with piping. receiver, separator, condensate pump and condenser with recording instruments.
1—2' dia. Stainless Steel Vacuum Pan, 100 gallons with condenser.
1—7' dia. cast iron Vacuum Pan with piping, condenser and vacuum pump.
1—Barnstead 25 gal. per hour Water Still.
1—Patterson-Kelly 12" dia. x 14' Stainless Steel Column.

REACTORS, KETTLES, TANKS & CONDENSERS

2—Pfaudler 250 gal. glass lined, jacketed, agitated Reactors.
4—Pfaudler 300 and 500 gal. glass lined, jacketed Kettles.
1—Vulcan 1220 sq. ft. Heat Exchanger, stainless shell and tubes.
1—Unused 947 sq. ft. Heat Exchanger, 304 S.S. tubes.
1—Struthers-Wells 500 sq. ft. Heat Exchanger, stainless shell and tubes.
5—1000 gal. Stainless Steel Clad Vertical Storage Tanks.
2—Langenskamp 600 gal. Stainless Steel agitated Tanks with coils.

CENTRIFUGES & FILTERS

1—Bird 18"x28" Solid Bowl Continuous 316 S.S.
5—Sparkler Model 33-S-28 Pressure Filters 304 S.S., 150 sq. ft.
1—Niagara Model 230-36 Pressure Filter, 304 S.S., 230 sq. ft.
1—Oliver 3'x1' Steel Rotary Vacuum Filter.
1—Sharples #16 Monel Super Centrifuge.
2—Sharples #16 Steel Super Centrifuges.
1—Fletcher 30" Stainless Steel, Under Driven Centrifugal.

PULVERIZERS, MIXERS & SCREENS

1—Patterson 6' dia. Steel Conical Blender, 15 HP motor.
1—Abbe 4 gal. Double Arm, jacketed Mixer.
1—Williams 30 HP Ball Bearing Hammermill.
2—Enterprise #160 Grinders with 20 HP motors.
1—Eppenbach 1 HP Homo Mixer.
2—Sprout Waldron 40"x84" Stainless Steel Gyratory Sifters.

DRYERS

4—Buflovak, Devine, Vacuum Shelf Dryers 20, 19, 18 and 10—42"x42" shelves with piping, condensate pumps and condensers.
2—Bartlett & Snow 6'x30' Styoe "M", Direct Heat Rotary Dryers.

PUMPS

20—1" to 3" Stainless Steel Centrifugal and Rotary Pumps.
1—Nash #TS-7 Two-Stage Vacuum Pump.
2—Nash #AL-673 Vacuum Pumps.
2—J. P. Devine Horizontal Vacuum Pumps, 7½ HP motors.

MISCELLANEOUS

1—I. R. 150 Ton Jet Refrigeration Unit.
1—Frick 15 Ton Refrigeration Unit.
25—Motors 1 to 25 HP, 3/60/220 and 440 volt.
450 Feet Stainless Steel piping and fittings 1" to 4".

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COLUMNS

3—Aluminum, Bubble Cap: (2) 36" dia. x 45 plate; 27" dia. x 18 plate.
1—Aluminum, Perforated Plate: 28" dia. x 36 plate.
6—Copper, Bubble Cap: 24" dia. x 11 plate, 36" dia. x 35 plate; (2) 42" dia. x 20 plate; 42" dia. x 40 plate; 48" dia. x 20 plate.
4—Copper, Tunnel Cap: 24" dia. x 30 plate; 36" dia. x 27 plates; 36" dia. x 39 plate; 36" dia. x 59 plate.
4—Stainless Steel, packed type: 8" dia. x 26' T347; 14" dia. x 25' T304; 24" dia. x 7' T316; 24" dia. x 27' T304.
1—Stainless Steel Rotary Plate Spray Type, 30" dia. x 41 plate T304.
3—Stainless Steel Perforated Plate, 42" dia. x 18 plate, T316 plates, steel shell.
1—Stainless Steel Bubble Cap Section T347, 48" dia.—12 plates.
1—Stainless Steel Baffle Plate or Cascade Type, 60" dia. x 50' high, 63 plates, T304.
1—Stainless Steel Bubble Cap, 64" dia. x 13 plate, T400 series.
1—Steel Bubble Cap, 48" dia. x 22 plates.

COMMINUTORS

1—Fitz. "D", Swinging Blades, St. St.
1—Fitz. "D-6", Fixed Blades, St. St.
1—Fitz. "F-8", Swinging Blades, St. St.

COMPRESSORS

1—Worthington 11 x 7 x 7 Air Comp., 75 HP.
1—Ing. Rand 8 x 6 Air Comp., 30 HP.
1—Nash L-3 Air Comp., 15 HP.
1—Nash MD-573, Bronze, 10 HP.
2—Worthington W-12, 6½" x 6", Air.
2—Spencer Turbo, Size 8, 10 HP.
1—York Ammonia Comp., 12½ x 14½, Steam Driven, 135 ton.
1—De Markus CO_2 Comp., 7½ HP.
1—Taber CO_2 Comp., 7½ HP.

CONDENSERS & EXCHANGERS

3—Stainless Steel Coil Condensers—40 sq. ft. & 55 sq. ft.
10—Stainless Steel Shell & Tube—13, 20, 24, 55, 135, 183, 200, 250, 425, 700 sq. ft.
3—Steel Shell & Tube—325 & 785 sq. ft.
10—Copper Shell & Tube—95, 108, 185, 275, 525, 660, 685, 750 sq. ft.
1—910 sq. ft. Admiralty tubes, steel shell & heads—UNUSED.
15—Aluminum coil & fin type—47 sq. ft. coil.

COOKERS

1—5000 gal. Horiz. Pr. Cooker 6'6" dia. x 20' long, Agit.
1—Contin. Starch Cooker—300 ft. 8" pipe.

COOLERS

2—Hardinge Rotary Coolers, partially submerged type, 8'8" dia. x 30' L and 8'8" dia. x 70' L.
1—Counterflow Pipe Cooler—3700 sq. ft.
1—Vogt Stainless Steel Pipe Cooler, 500 sq. ft. sprayed surface.
1—Stainless Steel Spill Cooler—282 sq. ft. tube surface.

CRYSTALLIZERS

2—Swenson-Walker Crystallizers—30' long.
3—B—S Horiz. 16" dia. x 17' long.
2—450 gal. Stainless Steel Jktd. & Agit. Crystallizing Tanks, 5 HP.
2—B—S Stainless Steel Jktd. & Agit. Crystallizing & Evap. Kettles, 25 HP.

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19 cu. ft. Patterson Blender.
250 cu. ft. Rotary jkt. SS Blender.
C20 Sharples Super-D-Hydrator SS.
C27 Sharples Super-D-Hydrator Monel.
36" x 50" Bird Cont. Centrifuge.
40" SS Bird Sus. Perf. Centrifuge.
200 gal. B. P. Wet Churn jkt. vac.
Rotoclone Collector Size 36, Type W.
3' x 14' x ¼" steel Column, 75 PSI.
4'x40'x1-1/16" Steel Column, 470 PSI.
Compressor Bury 1600@110#, 300 HP.
2350 sq. ft. Condenser, steel/SS.
5' x 20' x ¼" Rotary Cooler.
30" Robinson Rotary Cutter, 30 HP.
502-16 L.B. Roto Louvre Dryer.
705-20 L.B. Roto Louvre Dryer, SS.
705-24 L.B. Roto Louvre Dryer.
3000 CFM Lectro Dryer, Type CHR.
8'6" x 35' Rotary Dryer.
Screw-type Feeder 4CS B.P. SS.
243D Stokes Oscill. Granulator.
6' x 8' Abbe Ball Mill GPH, unlined.
7' x 18' Patterson Ball Mill 2 Comp.
Jeffrey Hammermills, 15 x 8, 20 x 12.
3620 DIXIE-Non Clog Hammermill.
Penn. Impact Crusher w/50 HP motor.
Micro Pulverizers 2TH & 1W.
Case Packer-Std. Knapp 6/1 gal. cans.
412G Stokes Microvac (NEW).
300 gal. S.S. Jktd. & Agit. Reactor, New.
2000 gal Reactor, 200 PSI
4' x 10' L. B. Screen 2 Deck.
40" x 84" Rotex #41 Single Deck.
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Gyro-Sifter Low Head 7 screens, 1 HP.
4500 gal. Hortonsphere.
2500 gal. Rubber lined Tank 7' x 9'.
12" Merrick Weightometer.

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Stokes 2'x6' Rotary Vac. Dryer.
1—Allbr. Nell 4x9 Atmos. Drum Dryers.
1—Buffalo Vac. Drum Dryer, 24"x20".

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4—Tolhurst 40" Suspended Type.
8—Centrifugals, 12", 20", 26", 30", 40" & 48" Steel. Copper. Stainless & Rubber.
6—Sharples No. 5A Stainless & #6.
2—De Laval Multi Clarifiers 300 & 301.

FILTERS
#2 Sweetland Filter. 12 Stainless covered leaves & other sizes. Oliver Filters.
1—Vallez Filter #49 with 41 Stainless covered 44½" dia. leaves.
Gen. Amer. 2'x1' Rotary Vac. Filter.
Sperry and Shriver 6" to 36" iron & wood.
Ertel 10 disc Filter, 12" dia.

KETTLES AND TANKS
Pfaudler 200 gal. Glass Lined Jack. Kettle.
Dopp 350 gal. Agit. Jack. CI Vac. Kettle.
2—Impreg. Units 30" & 36" dia. complete.
6—Jack. Steel Kettles up to 3000 gals.
2300 gal. vert. agit. Jack. Steel Kettle.
1—250 gal. Lead Lined Kettle.
Stainless, alum., copper, glass lined, lead lined and steel kettles and tanks.

PULVERIZERS AND MILLS
2—Mikro Pulverizers #2TH & #2SI.
Pebble Mills 24"x30", 30"x30", 30"x34", 30"x42" 4'x5'. Also jar mills.
#1 Raymond Autom. Pulverizer, 20 HP.
1—#00 Raymond Mill. 30 HP complete.
2—#0000 Raymond Mills.
Sturtevant #00 Swing Sledge Mill. 3 HP.
Schutz-O'Neill #1 & 20" Pulverizers.
Williams #3 & 2XX Hammer Mills.
Ball & Jewell Rotary Cutters Lab & up.
Jeffrey 18"x18" single Roll Crusher.
2—Robinson 18" & 22" BB Attrition Mills.
1—Lehman 4 roll WC., 12"x36" Steel Mill.
4—Lehman & Kent 3 Roll Steel Mills, 9" x32", 12"x30", 16"x40".
1—Monarch 9"x24" Steel Roller Mill, 3 pr. high. Also 7½x20. 4 Roll.
Houchin 18"x30" 4 Roll Granite Stone Mills.
2—U.S. & Premier 1½ HP Colloid Mills.

MIXERS, SIFTERS & SCREENS
Day Imperial 75 & 150 gal. Jack. Mixers.
Lancaster 6' dia. Vert. Mixer. 25 HP.
Kent 3 HP, continuous Dry Mixer.
Baker Perkins double arm Mixers, 100 & 50 gals. Also single arm Mixers.
Blystone 3000# horiz. Spiral Mixer.
Day Brighton 20 gal. Change Can Mixers.
Read 50 & 100 gal. double arm Mixers.
Read 80 qt. vert. Mixer, 3 speed.
Tyler 3'x5' Vibratory 2 deck Screen.
10—Dry Powder Mixers, 50 to 3,000#.
3—Day 8, 15 & 40 gal. Pony Mixers.
15—Portable Elec. Mixers, ¼ to 3 HP.
6—Lead and Paste Mixers to 150 gals.

MISC. AND SPECIALS
Stokes & Kux 2½" dia. single punch Preform Machines. Also rotary types.
Colton & Stokes ½ dia. single punch.
Anderson & French Oil Expellers.
3—Stokes and Day Powder Fillers.
Filling Machines & Labelers.
Pneumatic Scale Automatic Capper.
1—Howe Mogul barrel and bag packer.
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SCREENS — 3x5 single (Universal) 3x10, double Tyler, 3x10 Cedar Rapids, 5x12 double Robbins, 40x84 Rotex.

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2—Abbe-Lenart Jack. S.S. Mixers, 110 gals.
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Abbe Pebble & Tube Mill, 5'x22'—Buhrstone Lined.
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1—#10 Day 300 gal. Jacketed Sigma Blade Mixer.
4—New Heat Exc. 60' with Cupro Nickel Tubes.
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3—4'x8' Shaker Screens.
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1—Allis Chalmers Rotary Dryer, 7' x 64'.

2—Stokes Stainless Steel Rotating Vacuum Dryers, 3' x 10'.

1—Buflovak Double Drum Dryer, 42" x 120", ASME Code.

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Oils, Fats and Waxes

—Continued from page 62

market strength, and no immediate end to the shortage was in sight, at least until demand for linseed oil improves. Expeller linseed meal, 32 percent protein, held at $55.50 for March forward. Withdrawals against existing contracts were active.

Shipments of linseed meal, in pounds, were as follows:

	1956-57	1955-56
Past week	12,420,000	12,540,000
Since Sept. 1	408,940,000	476,470,000

Peanut Meal—Trading continued slow both from export and domestic delivery. Last week the government offered peanuts to produce about 2,000 tons of meal if the peanuts are sold for crushing. Prices were lower for 45 percent at $46.50 per ton f.o.b. Georgia and Alabama points for March-April shipment.

Soybean Meal — Demand was fairly good. Production continued at a heavy rate. Spot shipment meal was discounted slightly below futures. Forty-four percent meal was quoted at $46 per ton, bulk, Decatur, March-April; $47, May-September shipment. Mississippi Valley meal ranged from $48 to $49 per ton bulk, f.o.b. Valley points, March-April shipment.

Waxes

Higher cost of carnauba replacements from Brazil has not as yet been reflected locally due to the slow consuming demand. Stocks on spot were still available below cost of replacements. Shipments of fatty and yellows from Brazil were advanced 2c. to 3c. per pound. Stocks on spot while steadier were quotably unchanged. No. 3 Ceara crude was held at 65c. to 66c. per pound, and Parnahyba 67c. to 68c. per pound, spot according to quantity. Yellows also were unchanged, with No. 1 Ceara yellow quoted at $1.33 to $1.34 per pound, spot as to quantity, and yellow Parnahyba 2c. more. Candellia crude remained in limited supply on spot and ranged from 65c. to 69c. per pound spot and refined, 71c. to 75c., same basis. Crude beeswax was inactive and more or less nominal. Refined grades were in fair request. Prices were steady and covered a wide range depending upon quantity and seller.

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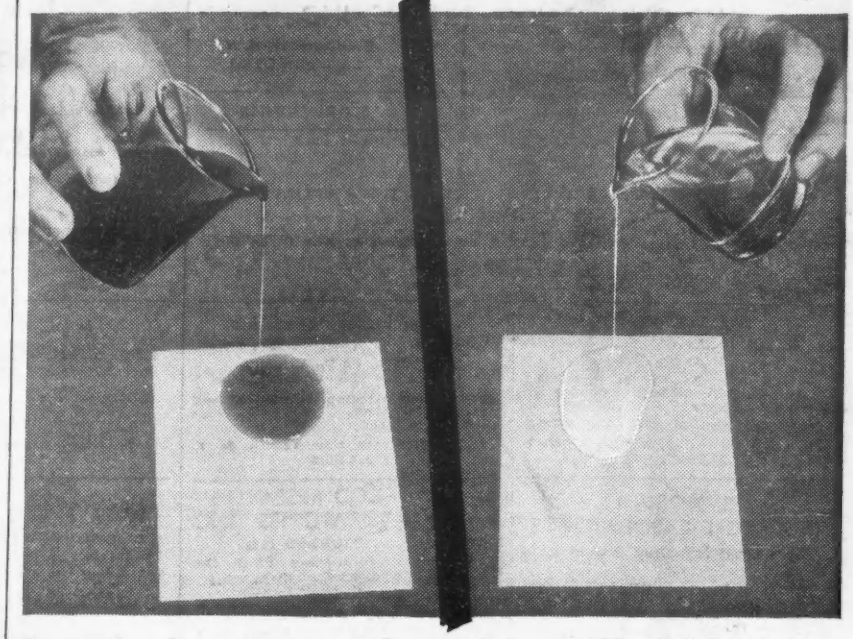

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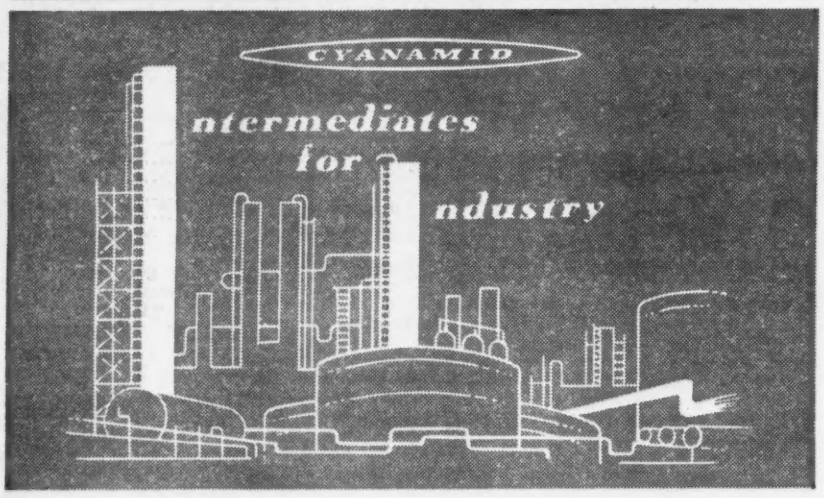

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